

## E MAIN ST

1980

## N CRAWFORD INTERSECTS

- 402 Unclaimed Freight &  
Furniture 335-0051
- 408 Fox Geo T © 335-1791
- 409 Saint Patrick Church 335-2833  
Wolfer Robt R Rev 335-2833  
Albietz Henry F Rev
- 414★Clark Erma M Mrs 339-4633
- 419 Sisters Of The Precious Blood  
convent 335-2430
- 423 Nichols Lloyd J
- 424 Elliott Anna L Mrs 339-5211
- 424½ Smith Alice M Mrs  
339-1549
- 427 Cargill Michl L © 339-3227
- 428 Abshire Benj O © 335-1353
- 431 Ingle Charles R © 339-2778
- 432 Waltz's Dry Cleaners No 1  
339-4015
- 432½ Brock Ann Mrs 399-0404
- 437 Knoop John H
- 441★Hodges Ronald W ©  
335-7724

## UNION BEGINS

- 504 Western John M © 335-4561
- 509 Stephenson Danl L 335-2188
- 509½ Gearhart Vickie S 339-3280
- 510 Yerty Marie D Mrs ©  
335-1728
- 514 Durand Briton R © 339-1210
- 515 Waddle John © 335-6577

**E MAIN ST 1980****E MAIN ST—Contd****NEW BEGINS****OAK BEGINS**

604 Cairns Helen M Mrs ©  
335-1947

608 Hecker Jack E © 339-1896

614★Clark James A 335-0665

614½ Vacant

617 Van Cleve School 339-4114

620 Cox Charles A Jr ©

630 Sutton C Robt © 339-0892

**N COUNTS BEGINS****S COUNTS BEGINS**

702 Barrett Charles C © 339-8774

703 Wagner Sudie B 339-7617

707 Mathews James G © 335-1323

708 Kessler Paul E © 339-4175

708½ Vacant

713 Yount Bernice D Mrs  
339-2131

714 Saunders Glenn B © 335-1064

715 Jones James E © 339-3413

717 Hartley Douglas R ©  
335-4118

717½ Vacant

720 Johnston Richd E © 335-7658

723 Groff Wm W © 335-4609

**N FRANK ST BEGINS****S FRANK ST BEGINS**

802 No Return

803 Adkins Arth © 339-1236

804 Schlimmer Vashti B 339-2394

809 Martin Minnie M Mrs ©  
339-8285

810 Thompson Edna M Mrs ©  
339-1471

810½★Acel James

814 Mc Gill Clifton D © 335-2701

815 Williams Jewell M ©  
335-4453

819 Macy E Burnell © 339-1909

820 Shroyer Dale K © 339-5884

825 Pfister Charles J © 339-3422

828 Johnson Marie ©

831 Houser James H © 335-8757

834★Cook Harold J © 335-2990

**WILLIAMS ST BEGINS**

901 Pomeranz Fred F © 335-6175

902★Bramlette Wm E

903★Ullery Clem A © 335-2264

909 Ball Herbert L © 335-8824

910 Mc Clure Rita B Mrs ©  
335-7035

915 Kirsch Kenneth A ©  
335-0487

**E WATER ST 1980****E WATER ST—Contd**

18½ Leon's Beauty Shop 335-4106

21 Hagen Axel 335-4429

23 Wetz Leonard R 339-8393

**N WALNUT INTERSECTS**

101 Bunch C Gene © 335-8992

107 Hufford Zelpha H Mrs ©  
339-8123

107½★Garner Danl

111 Laufer Loretta M 335-2118

111½ Dirscherl Margt J Mrs  
339-0903

115 Tyminski Judy M Mrs ©

116 Bill's Bicycle Shop 335-1537  
Barnthouse Howard D  
335-2800

116½ Barnthouse Howard D II

121★Mathes Freda 335-5494

121½★Kehler Judith L 335-0901

124 Girl's Civic League

124½ Mc Neal Emily H 339-1768

**N MULBERRY INTERSECTS**201 Overfield Tavern Museum  
historical hse209 Short's Appliances Inc elec  
335-4331

209½★Gallagher Danl

210 Hobart Cabt Co (Stge)  
335-4666

211½★Snyder Sherry

213 Music Box 335-4247

213½★La Veck Lance R 335-5137

215 Music Box (Addl Space)

**CHESSIE SYS CROSSES**

301 Hobart Cabinet Co 335-4666

**N CRAWFORD INTERSECTS**405 Mc Connell Vernon S Jr ©  
339-2314

409 Lutz Fred J 335-7983

413 Hysinger Maudie Mrs  
335-8740

417 Vacant

420 Saint Patrick School 339-3705

423 Strine Robt W © 335-2666

431 Brown-Bridge Mills (Stge)

444 Vacant

446 Clark Mark A

450 Walker Wm E 339-0773

**NEW ENDS**518 Brown-Bridge Mills Inc  
gummed paper 339-0561523 City Board Of Educ (Materials  
Cntr)

622 Wintrow Clinton J 339-2229

**N COUNTS ST ENDS**



## E MAIN ST

1975

**E MAIN ST—Contd**

210 Gillis Moving & Delivery  
335-5091  
210½ Spangler Charles  
211★Brown Ivan  
Vacant  
211½ Vacant  
215 Sturdivant Jon Antique Shop  
335-6798  
Sturdivant Jon  
216 Nichols James E  
216½ Bowlin Hazel G Mrs  
221 Electronic Shack 339-3733  
223 Frank C Furniture

**B&O-C&O RR CROSSSES  
CLAY INTERSECTS**

304★Roth Lemuel  
★Marlow Becky L  
305 Trojan Coal & Builders  
Supply Co 335-1413  
306★Walker James 339-2308  
306½ Victor Ruth M Mrs  
335-4404  
310 Hackett Thos E © 335-1090  
311 No Return  
311½ Robertson Homer  
315 Elswick Elza G Mrs 335-2689  
316 Elkins Norma Mrs  
317 Myers Mary L 335-8248  
320 Leath Robt D © 335-1763  
323 Sturdivant Jon Antique Shop  
(Stge)

**N CRAWFORD INTERSECTS**

402 Family Furniture 339-3854  
408 Fox Geo T © 335-1791  
409 Saint Patrick Church 335-2833  
Wolfer Robt R Rev 335-2833  
414 Kessler Thos W Jr 335-6346  
419 Sisters Of The Precious Blood  
convent 335-2430  
423 Higgins John M 335-0821  
424 Clabaugh Martha © 339-3396  
424½ Smith Alice Mrs 335-3549  
427 Cargill Michl L © 339-3227  
428 Abshire Benj O © 335-1353  
431 Vacant  
432 Waltz's Dry Cleaners No 1  
339-4015  
432½ Vacant  
437 Beam Patricia Mrs 335-4009  
441★Persinger Phillip C ©  
335-6860

**UNION BEGINS**

504 Gero Delmar W © 335-4145  
509★Reed John M  
510 Yerty Marie D Mrs ©  
335-1728  
514 Durand Briton R © 335-3210  
515★Miller Carey P 335-6577  
**NEW BEGINS**  
**OAK BEGINS**  
604 Cairns S Craig © 335-1947  
608 Hecker Jack E © 335-3896  
614 Gyarmati Imre © 335-0875  
614½ Vacant  
617 Van Cleve School  
Troy School Pre-Kindergarten  
Program 335-0119

620★Owen Douglas M  
620½★Shoup Michl L 335-1233  
630★Sutton C Robt ©  
**N COUNTS BEGINS**  
**S COUNTS BEGINS**  
702 Fuller Deva © 335-0395  
703 Manning David F © 339-3684  
707 Mathews James G © 335-1323  
708★Kessler Paul E 339-4175  
708½ Easley Blanche Mrs  
713 Carmichael Mary A Mrs  
714 Wayman Garth © 335-6866  
715 Jones James E 339-3413  
717★Hartley Doug ©  
717½ Vacant  
720 Johnston Richd E © 335-7658  
723 Groff Wm W © 335-4609

**N FRANK ST BEGINS****S FRANK ST BEGINS**

802 Strickler James  
803 Adkins Arth © 335-3236  
804★Lenhart Terry D 339-4642  
809 Martin Minnie M Mrs ©  
335-1785  
810 Thompson Edna M Mrs ©  
335-3471  
810½ Vacant  
814★Sommer Michl R © 335-8144  
815 Williams Jewell M ©  
335-4453  
819 Macy E Burnell © 335-3909  
820 Shroyer Dale K ©  
825 Pfister Charles J © 339-3422  
828 Johnson Marie ©  
831 Houser James H © 335-8757  
834★Deaton Dale F © 335-3701  
**WILLIAMS ST BEGINS**  
901 Pomeranz Fred F © 335-6175  
902★Hayes Fred D 335-5735

11

5

E. W. MAIN ST.

1915, 535 - 542 AND 555 - 1953



**E WATER ST 1975**

1

**E WATER ST—Contd**

107 Hufford Zelpha H Mrs ©  
335-2322

107½★Swartz Robt

111 Laufer Loretta M 335-2118

111½ Dirscherl Margt J Mrs  
335-0903

115 Tyminski Edw F © 339-3221

116 Bill's Bicycle Shop 335-1537  
Barnthouse Howard D  
335-2800

116½★Wenrick Susan 335-7328

121★Spahr C

121½ Rue Charles

124 Girl's Civic League 335-4235

124½ Beemer Lawrence E Jr  
335-4233

**N MULBERRY INTERSECTS**

201 Overfield Tavern Museum  
historical hse 335-4019

209 Roeth's Appliances Inc elec  
335-4331

209½ Pickering Jon 335-2980

210 Hobart Cabt Co (Stge)  
335-3018

211½ Wilson Matthew

213 Music Box 335-4247

213½★Massie Ronald

215 Music Box (Addl Space)

**B&ORR CROSSES**

301 Hobart Cabinet Co 335-4666

**N CRAWFORD INTERSECTS**

405★Mc Connell Vernon Jr  
339-2314

409 Lutz Esther J Mrs ©  
335-3267

417 Catalano Michl 335-5804

420 Saint Patrick School 339-3705

423 Strine Robt W © 335-2666

431 Brown-Bridge Mills (Stge)

444 Studebaker Bessie M 335-2383

446 Carpenter Robt I 339-4556

450★Johnson May D

**NEW ENDS**

518 Brown-Bridge Mills Inc  
gummed paper 335-0561

523 City Board Of Educ Materials  
Center

**N COUNTS ST ENDS**

1

**WATER ST W —FROM 24 N**

## E MAIN ST 1970

335-2833

414 Kessler Thos W Jr 335-6346

419 Sisters Of The Precious

Blood convent 335-2430

423 Higgins John M 335-0821

424 Kendall Geo D © 335-3190

424½ Smith Alice Mrs 335-3549

427 Braun Mary T © 335-6741

428 Abshire Benj O © 335-1353

431 Strock Harriet Mrs ©

335-5241

432 Waltz's Dry Cleaners clo

332-4115

432½ Wilson Harriet E Mrs

335-8525

437 Beam Carl E

441 Mc Guire Charles M ©

335-2683

## UNION BEGINS

504 Gero Delmar W © 335-4145

509 Newnam Donald 335-0859

510 Yerty Marie D Mrs ©

335-1728

514 Durand Briton R ©

335-3210

515 Dilley Augusta Mrs 335-4298

## NEW BEGINS

## OAK BEGINS

E MAIN ST

1970

**E MAIN ST—Contd****ns Van Cleve School 335-1526****Van Cleve Sch (Lunch Rm)  
332-3528****604 Cairns S Craig © 335-1947****608 Hecker Jack E © 335-3896****614 Vacant****620 Berry Roy O 335-3050****620½ Giffen Geneva****630 City Bd Of Educ 335-1919****Dir Of Elem Educ 335-4030****Supt Of Schs 335-2320****S COUNTS BEGINS****N COUNTS BEGINS****702 Towne Calvin E © 335-0395****703 Crawford Charles R ©  
335-2786****707 No Return****708 Kessler Paul E © 332-3241****708½ Easley Blanche Mrs****713 Carmichael Lowell I****714 Terrell Ivan D Hon ©  
332-4022****715 Denny David R 335-2778****717 Noonan Mary E © 335-2746****717½ Welsh Michl D 332-6175****720 Johnston Richd E ©  
335-7658****723 Groff Wm W © 335-4609****S FRANK ST BEGINS****N FRANK ST BEGINS****802 Vacant**



## E WATER ST 1970

23 Bridges Michl 332-4867

## N WALNUT INTERSECTS

101 Bunch C Gene © 335-8992

107 Hufford Zelpha H Mrs ©  
335-2322

107½ Rayburn Frances R Mrs  
335-4420

111 Laufer Loretta M

111½ Dirscherl Margt Mrs  
335-0903

115 Curtis Marvin S 335-2227

116 Coomer Wm C © 335-0849

116½ Jeffery Clarence O Jr  
335-3428

121 Browning Robt T 335-1065

Rear Gillen Celaine R

121½ Markis Charles A 335-0654

124 Girl's Civic League 335-4235

124½ Hall Pamela S 335-4233

## N MULBERRY INTERSECTS

201 Overfield House

204½ Hensen Roni

206 Ingle Roscoe E 335-3988

209 Roeth's Appliances Inc elec  
335-4331

209½ Pickering Jon 335-2980

210 Hobart Cabt Co (Stge)  
335-3018

211½ Williams Charles

213 Music Box The 335-4247

**E WATER ST 1970**

---

**E WATER ST—Contd****213½ Kolleda Freda K Mrs****215 Massie Plumbing & Heating  
332-6082****B&ORR CROSSES****301 Hobart Cabt Co (Plant)****N CRAWFORD INTERSECTS****405 Billhimer Martha A Mrs ©  
335-3244****409 Lutz Robt E © 335-3267****417 Sampson Michl E 335-1333****420 Saint Patrick School  
332-4277****423 Strine Robt W © 335-2666****431 Brown-Bridge Mills (Stge)****444 Studebaker Bessie M  
335-2383****446 Becker Ralph T****450 Wolfe Wilford W 335-7509****NEW ENDS****518 Brown-Bridge Mills Inc  
gummed paper 335-0561****N COUNTS ST ENDS**

---



## E MAIN ST 1966

332-1232

123 Vacant

**Mulberry intersects**

200 Troy Inn hotel 335-4416

201 Jones Stuart C gro

335-6899

Estes Andrew C ©

332-3453

203 Briggs Loretta M Mrs

drsmkr 335-4054

207 Bristley Carl R © 339-4242

210 Croner Ruth M Mrs ©

339-3504

211 Hoagland Clara W Mrs ©

335-4233

215 Ward Dorothy Mrs 335-5596

216 Sumner Geo E

216½ Cruea Wilfred 335-2228

220-22 Certified Oil Co gas sta

332-9471

221 Henne's Mkt gro 335-5816

223 Browning's Mr Salon beauty

shop 335-5915

304 Honeyman Lucille M Mrs

335-4923



## E MAIN ST

1966

38

## MAIN E-Contd

305 Trojan Coal & Bldrs Sup Co  
335-5656

306 No Return

306½ Dapore Robt W

310 Hackett Thos E © 339-8393

311 Elliott Otto E

311½ Robbins Homer

**B&Ory crosses****Clay intersects**

315 Fox Ida J Mrs 332-8372

316 Elkins Nursing Home

335-7016

Elkins Dempsey ©

335-7016

317 Donohue Margt Mrs

332-7651

320 No Return

320½ Vacant

323 Quinn Wm antiques

5

**N Crawford intersects**

401 StPatrick Catholic Church

339-6681

402 Reichard Auto Repr

335-7785

408 Woodard Carrell B ©

339-8392

409 Stenz Geo R Rev 339-6681

414 Anderson Minerva A Mrs ©

419 Sisters of the Precious

Blood 339-4146

423 Tyler Agnes K Mrs ©

339-9361

424 Kendall Geo D 339-6463

424½ Smith Alice Mrs 339-9541

425 Taylor Wm E 335-6167

427 Braun Mary T © 339-6289

428 Abshire Benj O © 339-6462

431 Strock Glenn C © 335-5241

432 Waltz's Dry Clns 332-7306

432½ Morgan Don H

437 Base Larry L 339-4837

441 McGuire Chas M ©

339-6288

**Union intersects**

504 Zerkel Martha A Mrs ©

332-4028

509 Langston Wm L ©

510 Yerty Marie D Mrs ©

339-6086

514 Henne Dorothy © 339-8280

515 Dilley Gerald M © 335-6660

**New begins****Oak begins**

ns VanCleve Prep School

339-3266

VanCleve Prep Sch lunch

rm 332-3528

604 Cairns S Craig © 339-8916

608 Hecker Jack E ©

614 Snyder Robt F © 335-3104

620 Brown Geo E 339-8506

620½ Giffen Geneva

630 Dir of Elem Educ 335-4030

Supt of Schools 339-9181

Board of Educ 339-3374

**S Counts intersects**

702 Todd Raymond E ©

339-6051

703 Crawford Chas R ©

339-8379

707 Osting Alvin A © 332-3805

708 Kessler Paul E © 332-3241

708½ Easley Blanche Mrs

713 Carmichael Lowell I

714 Terrell Ivan D © 332-4022

715 Denny David R 339-8378

717 Noonan Mary E © 339-8377

717½ Russell Wm

720 Johnston Richd E ©

332-6723

723 Nicklaus Harry E ©

339-8307

**S Frank intersects**

802 Reed Paul E

803 Adkins Arth © 339-8563

804 Plank James © 339-6129

809 Niesley Chas M © 339-8806

810 Thompson Edna M Mrs ©

335-3471

810½ Vacant

814 Long Chas L © 339-6126

815 Williams Jewell M ©

335-4453

819 Macy E Burnell © 339-8808

820 Lewis Joseph A © 339-4560

825 Pfister Chas J © 332-6174

828 Patterson Saml ©

831 Houser Jas H 335-8757

901 Bagford Ralph C ©

339-4656

902 Scaggs Orville J 339-8868

903 Laufer Wm F jr ©

335-4894

909 Young Howard F ©

335-4893

910 Brubaker Eva W Mrs ©

335-5218

915 Garman Ray E © 335-5195

916 Snider Luther H ©

339-4566

919 Grump Jas D © 332-6652

923 Markley Jos W © 335-5986

924 Davis Donald A © 339-4567

929 Heffner Douglas L 335-5191

930 DeVilbiss Roy C ©

339-6128

933 Rozell Ronald A © 335-5193

934 Kilpatrick James E ©

332-3671

**E WATER ST 1966**

209 $\frac{1}{2}$  Pickering Jon 339-4245

210 Hobart Cabt Co (stge)  
339-6696

211 $\frac{1}{2}$  Jay Jesse

213 Recore Arvie Music Center  
335-1166

213 $\frac{1}{2}$  Noonan Wm M jr  
332-4310

215 Massie Plmb & Htg  
332-6082

**B&ORR crosses****S Clay intersects**

301 Hobart Cabt Co (plant)  
339-8666

**N Crawford intersects**

405 Billhimer Martha A Mrs ©  
339-8564

409-13 Lutz Robt E © 339-8562

417 Catalano Michl © 335-4245

420 StPatrick Sch 332-4277

423 Strine Robt W © 335-5318

431 No Return

439 Montjoy Barbara A Mrs

441-47 Brown-Bridge Mills Inc  
(stge)

444 Studebaker Edith M Mrs

446 Fry Wm R 339-8800

450 Wesco Kenneth H 339-8807

**New intersects****Oak intersects**

521-25 Brown-Bridge Mills Inc  
gummed paper  
332-1266

**N Frank intersects**



## E MAIN ST

1962

209 E. WATER

TEL. 333-4334

## MAIN E—Contd

315 Vacant  
 316 Hance Rosalie M Mrs @  
     335-7021  
 317 Hogan Jean H @ FE2-3641  
 320 Williams Clyde L 335-7023  
 320½ Cecil Harry L  
 323 K of C Hall  
     K of C Council No 3873  
     FE9-6280  
     Jack & Jill Nursery Sch  
     FE2-4818

5

N Crawford intersects  
 401 StPatrick Cath Church  
     FE9-6681  
 402 Reichard Auto Repr Shop  
     FE9-7446  
 408 Hackett Thos E @ FE9-3752  
 409 Stenz Geo R Rev FE9-6681  
 414 Anderson Minerva A  
     Mrs @  
 419 Sisters of the Precious Blood  
     FE9-7146  
 423 Tyler Agnes K Mrs @  
     FE9-9361  
 424 Kendall Geo D FE9-6463  
 424½ Smith Alice Mrs FE9-9541  
 425 Taylor Wm E FE9-3487  
 427 Braun Mary T @ FE9-6289  
 428 Abshire Benj O @ FE9-6462  
 431 Strock Glenn C @ FE5-5241  
 432 Waltz's Dry Clns clo cln  
     FE2-7306  
 432½ Rose Wm E  
 437 Knoop Griffith H @ FE9-6287  
 441 McGuire Chas M @ FE9-6288

Union intersects  
 504 Zerkel Herbert W @ FE2-4028  
 509 Hickman John C FE5-5175  
 510 Yerty Marie D Mrs @ FE9-6086  
 514 Henne Dorothy @ FE9-8280  
 515 Matthews Robt L @ FE9-3480

New begins  
 520 Kraye Eva A @

Oak begins  
     ns VanCleve Prep School  
     FE9-3266  
     VanCleve Prep School  
     (lunch room) FE2-3528  
 604 Cairns S Craig @ FE9-8916  
 608 Crane Geo F @ FE9-6728  
 614 Snyder Harry E @ FE9-6727  
 620 Fletcher Kenneth C 339-8506  
 620½ Giffen Geneva  
 630 Dir of Schools FE9-3774  
     Supt of Schools FE9-9181  
     Board of Educ FE9-3374

S Counts intersects  
 702 Todd Raymond E @  
     FE9-8146  
 703 Crawford Chas R @ FE9-8379  
 707 Osting Alvin A @ FE2-3805  
 708 Kessler Paul E @ FE2-3241  
 708½ Easley Blanche  
 713 McCall Ezekiel W FE9-8376  
 714 Terrell Ivan D @ FE2-4022  
 715 Lafferty Hugh H FE9-8378  
 717 Osting Norman E  
 717½ Noonan Mary E @ FE9-8377  
 720 Johnston Richd E @ FE2-6723  
 723 Schultz David H @ FE9-8308

S Frank intersects

802 Johnson Homer E  
 803 Ryan Wm A @ FE5-3393  
 804 Kalett Herman 339-9121  
 809 Martin Minnie M Mrs @  
     FE9-8806  
 810 Baird Robt M @ FE2-3737  
 810½ DuLude Gerald M  
 814 Long Chas L @ FE9-6126  
 815 Williams Jewell M @ FE5-4453  
 819 Macy E Burnell @ FE9-8808  
 820 Englehart Margt L @ FE9-7569  
 825 Pfister Chas J @ FE2-6174  
 828 Unroe Russell W @ FE9-6120  
 831 Houser Jas H FE5-4451  
 834 Vacant  
 901 Bagford Ralph C @ FE9-7656  
 902 Welborn Ray E @ FE9-8866  
 903 Laufer Wm F jr @ FE5-4894  
 909 Young Howard F @ FE5-4893  
 910 Brubaker Chas G @  
     FE5-5218  
 915 Garman Ray E @ FE5-5195  
 916 Snider Luther H @ FE9-7566  
 919 Grump Jas D @ FE2-6652  
 923 Markley Jos W @ FE5-5986  
 924 Davis Donald A @ 339-7567  
 929 Heffner Douglas L FE5-5191  
 930 DeVilbiss Roy C @ FE9-6128  
 933 Rozell Ronald A @ FE5-5193  
 934 Fish Myrle L Mrs @  
     FE2-3671  
 937 Porter Jas H FE2-6654  
 940 Walpole John R @ FE2-4247  
 941 Vacant  
 947 LeClerc Guy J @ FE9-3056  
 948 Chipley Wm A @ FE9-9825  
 975 Robinson Herbert E @  
     FE2-7395

E Franklin intersects  
 1033 Gross Leo E @ FE2-4946  
 1035 Henne Robt C @ FE2-4179  
 1037 Enyeart Harley D @ FE5-4336  
 1039 Johnson Daisy M Mrs @  
     FE9-8876  
 1051 Cline Bruce E @ FE9-3059  
 1053 Pearson Zulu M Mrs @  
     FE9-3058  
 1055 Jacobs Eva Mrs @ FE9-6946  
 1057 Houser C Harry @ FE5-4491  
 1057½ Vacant  
 1102 Arter Ima J Mrs @ FE9-3093  
 1104 Kline Mildred L Mrs @  
     FE9-3666  
 1106 Meigs Clifford L @ FE5-3158  
 1108 Gigicos Geo C @ FE9-9716  
 1110 Kennedy John J @  
 1112 Garmer Richd A @ FE5-5376  
 1114 Garwood Edgar D @ FE9-9540  
 1116 Long Chas W FE9-9546  
 1120 Vonderhyde Carroll E @  
     FE2-4197

City limits  
 1128 Sundrup Mary S Mrs @  
     FE2-6342  
 1227 Zimmerman Geo R @  
     FE9-6968

E Canal ends  
 1301 Hirsch Clarence F @  
     FE9-9547  
 1304 Frank Robt W 339-6967  
 1306 Dorner John J FE9-3091  
 1306½ Frings Carl S  
 1307 Vacant



# E WATER ST 1962

1

WATER E—From 125 N Main east  
3 State Bur of Mtr Vehicles

FE9-3032

5 Wells Ralph W © ins FE2-7705

7 Shurben Nursing Home FE9-9074

Shurben Ray D FE9-9074

10 Vacant

13 Epler Ennis K FE5-4021

13½ Dalzell Phil L FE2-4332

16 West Fred H © 335-4855

17 Pearson Jos E © FE5-5641

18 Gray Albert S © FE9-3291

18½ Wilgus Bessie B Mrs

FE5-4868

Stull Ruth D Mrs 335-4866

21 Hagen Axel FE5-4429

23 Wilson Ernest C FE2-3590

N Walnut intersects

101 Bunch C Gene © FE2-3597

107 Hufford Jacob A © FE9-8973

107½ Edmunds Harriet F Mrs

FE9-8972

111 Vacant

111½ Martin Donna L Mrs

FE5-5505

115 Robbins Grace P Mrs ©

FE5-5062

116 Harris G Raymond © FE5-5063

116½ Vorpe Geo W FE5-4051

121 Vacant

123 Vacant

124 Girls Civic League FE5-4235

124½ Smitley David J 332-7241

N Mulberry intersects

201 Overfield House The

204½ Rush Eva Mrs FE5-4010

206 Clegg Willard H 335-4016

209 Roeth's Appliances Inc FE5-4331

209½ McGuire Jas E

210 Hobart Cab Co (stge)

211 Zirkle Lbr Sls FE2-7447

211½ Jaeger Edwin L

213 Recore Arvie Music Center

FE5-1166

215 Massie Plmb & Htg FE2-6082

B&ORR crosses

S Clay intersects

310 Hobart Cabt Co (plant)

FE9-8666

N Crawford intersects

405 Billhimer Martha A Mrs ©

FE9-8564

409 Lutz Robt E © 339-8562

413 Lutz Kittie Mrs

417 Catalano Michl © FE5-4245

420 StPatrick Sch FE2-4277

423 Strine Robt W © FE5-5318

431 Donovan Paul R © 332-4718

439 Vacant

441 Brown-Bridge Mills Inc (stge)

444 Hunter Donald L

446 Fry Wm R

447 Brown-Bridge Mills Inc (stge)

450 Rodgers Cora E Mrs ©

FE5-4546

New intersects

Oak intersects

521-25 Brown-Ridge Mills Inc

gummed paper FE2-1266

N Frank intersects

APPENDIX D  
SOIL SURVEY DATA



United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for **Miami County, Ohio**



April 2, 2020



# Preface

---

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

# Contents

---

<b>Preface</b> .....	2
<b>Soil Map</b> .....	5
Soil Map.....	6
Legend.....	7
Map Unit Legend.....	8
Map Unit Descriptions.....	8
Miami County, Ohio.....	10
EIA—Eldean loam, 0 to 2 percent slopes.....	10
<b>References</b> .....	12



# Soil Map

---

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


# Custom Soil Resource Report Soil Map



## Custom Soil Resource Report


### MAP LEGEND

#### Area of Interest (AOI)

 Area of Interest (AOI)

#### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

#### Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole


 Slide or Slip


 Sodic Spot


 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

#### Water Features

 Streams and Canals

#### Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

#### Background

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Miami County, Ohio  
Survey Area Data: Version 18, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 14, 2015—Mar 28, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
EIA	Eldean loam, 0 to 2 percent slopes	4.6	100.0%
<b>Totals for Area of Interest</b>		<b>4.6</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

## Custom Soil Resource Report

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Miami County, Ohio

### EIA—Eldean loam, 0 to 2 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2vzcq  
*Elevation:* 490 to 1,150 feet  
*Mean annual precipitation:* 37 to 46 inches  
*Mean annual air temperature:* 48 to 55 degrees F  
*Frost-free period:* 145 to 180 days  
*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

*Eldean and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Eldean

##### Setting

*Landform:* Outwash terraces  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Loamy outwash

##### Typical profile

*Ap - 0 to 12 inches:* loam  
*Bt - 12 to 23 inches:* clay loam  
*BC - 23 to 30 inches:* gravelly clay loam  
*C - 30 to 79 inches:* stratified gravelly coarse sand to very gravelly sand to extremely gravelly coarse sandy loam

##### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* 20 to 40 inches to strongly contrasting textural stratification  
*Natural drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.60 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 65 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Low (about 3.6 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2s  
*Hydrologic Soil Group:* B  
*Hydric soil rating:* No



## Minor Components

### Warsaw

*Percent of map unit:* 5 percent  
*Landform:* Outwash terraces  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

### Ockley

*Percent of map unit:* 4 percent  
*Landform:* Outwash terraces  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

### Sleeth

*Percent of map unit:* 1 percent  
*Landform:* Depressions on stream terraces  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Concave  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

# References

---

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_054262](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262)
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053577](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577)
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053580](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580)
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2\\_053374](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374)
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelpdb1043084>

## Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\\_054242](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242)

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_052290.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf)



APPENDIX E  
CORRESPONDENCE DOCUMENTATION

## USER QUESTIONNAIRE

**INTRODUCTION:** In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"), the user must conduct the following inquiries required by 40 CFR 312.24, 312.28, 312.29, 312.30, and 312.31. The user should provide the following information to the *environmental professional*. Failure to conduct these inquiries could result in a determination that "*all appropriate inquiries*" is not complete.

(1) **Environmental liens that are filed or recorded against the property. (40 CFR 312.25).**

Question: Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state, or local law? Yes: \_\_\_\_\_ No: \_\_\_\_\_

If yes, please provide details below, or attach a separate sheet.

*Buyer not aware*

(2) **Activity and use limitations that are in place on the property or that have been filed or recorded against the property (40 CFR 312.26(a)(1)(v) and vi).**

Question: Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law? Yes: \_\_\_\_\_ No: \_\_\_\_\_

If yes, please provide details below, or attach a separate sheet.

(3) **Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).**

Question: As the user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business? Yes: \_\_\_\_\_ No: X

If yes, please provide details below, or attach a separate sheet.

(4) **Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29).**

Question: Does the purchase price being paid for this property reasonably reflect the fair market value of the property? Yes: X No: \_\_\_\_\_ *after clean up*

If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property? Yes: X No: \_\_\_\_\_

If yes, please provide details below, or attach a separate sheet

*Several potential issues*

(5) **Commonly known or reasonably ascertainable information about the property (40 CFR 312.30).**

Question: Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? Yes: \_\_\_\_\_ No: X

For example, as a user,

(a) Do you know the past uses of the property? Yes \_\_\_\_\_ No: X

(b) Do you know of specific chemicals that are present or once were present at the property? Yes \_\_\_\_\_ No: X

(c) Do you know of spills or other chemical releases that have taken place at the property? Yes \_\_\_\_\_ No: X

(d) Do you know of any environmental cleanups that have taken place at the property? Yes \_\_\_\_\_ No: X

Yes \_\_\_\_\_ No: X  
Yes \_\_\_\_\_ No: X  
Yes \_\_\_\_\_ No: X  
Yes \_\_\_\_\_ No: X

(6) **The degree of obviousness of the presence of likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).**

Question: As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property? Yes: X No: \_\_\_\_\_

If yes, please provide details below, or attach a separate sheet

*Public information*

- (7) In addition, certain information should be collected, if available, and provided to the *environmental professional* at MAKsolve. This information is intended to assist the *environmental professional*, but is not necessarily required to qualify for one of the LLPs. The information includes:

(a) the reason why the Phase I is being performed,

To identify potential issues prior to sale

(b) the type of property and type of property transaction, for example, sale, purchase, exchange, etc.,

(c) the complete and correct address for the property (a map or other documentation showing property location and boundaries is helpful),

518 Water Street + 1 additional lot owned, Troy, Ohio

(d) the scope of services desired for the Phase I (including whether any parties to the *property* transaction may have a required standard scope of services or whether any considerations beyond the requirements of Practice E 1527 are to be considered),

(e) identification of all parties who will rely on the Phase I report,

Any potential buyer of the property

(f) identification of the site contact and how the contact can be reached,

Stuart Postle cell 937-478-0388

(g) any special terms and conditions which must be agreed upon by the *environmental professional*, and

Not aware of any

(h) any other knowledge or experience with the *property* that may be pertinent to the *environmental professional* (for example, copies of any available prior *environmental site assessment reports*, documents, correspondence, etc., concerning the *property* and its environmental condition).

None

To the best of the signatory's knowledge, as of the date hereof, the answers given in this questionnaire are deemed accurate. No active environmental investigation has been personally conducted by the signatory. Furthermore, this certification shall not be construed to constitute a professional opinion or an all-inclusive report but, rather, merely a disclosure of information known to the signatory as of the date hereof.

Signature

Michael Gearhardt

Date

3/6/2020

Printed Name

Michael Gearhardt

Title/Affiliation with Subject Property

President

Company Name

518 Water LLC





March 9, 2021

Mr. Tim Davis, Director of Planning and Zoning  
City of Troy Development Department  
City Hall, South Annex  
102 South Market Street  
Troy, OH 45373

VIA email: [tim.davis@troyohio.gov](mailto:tim.davis@troyohio.gov)

**Subject Property:**     **Spinnaker Coating, former Kimberly Clark**  
                                  **518 East Water Street, Troy, OH 45373**  
                                  **Parcel ID: D08-101816**

Mr. Davis:

MAKSolve is conducting a Phase I Environmental Site Assessment of the aforementioned property. As part of the site assessment, we are interested for information regarding the current zoning, if any code violations are on file for the subject property and if the city maintains any archived building records or permits for this facility.

You can send your response to my attention at [john@maksolve.com](mailto:john@maksolve.com), FAX me at 937-660-6845, or mail it to my attention at the address below.

If you have any questions regarding this submittal, please call me at 513-383-0233.

Thank you.

A handwritten signature in blue ink that reads "John Bowen".

John Bowen  
MAKSolve



March 9, 2021

Ms. Veronica Showalter  
Fiscal Manager  
City of Troy, Ohio Utility Billing & Collection  
100 South Market Street  
Troy, OH 45373

VIA email: [veronica.showalter@troyohio.gov](mailto:veronica.showalter@troyohio.gov)

**Subject Property:**     **Spinnaker Coating, former Kimberly Clark**  
                                  **518 East Water Street, Troy, OH 45373**  
                                  **Parcel ID: D08-101816**

Ms. Showalter:

MAKSolve is conducting a Phase I Environmental Site Assessment of the aforementioned property. As part of the site assessment, we are requesting a records review regarding the property. Specifically, we are requesting:

Date of water connection  
Water violations (if applicable)  
Date of sewer hookup  
Special sewer permits (if applicable)  
Sewer discharge violations (if applicable)  
Information regarding any current or historic septic tank systems (if applicable)

You can send your response to my attention at [john@maksolve.com](mailto:john@maksolve.com), FAX me at 937-660-6845, or mail it to my attention at the address below.

If you have any questions regarding this submittal, please call me at 513-383-0233.

Thank you.

A handwritten signature in blue ink that reads "John Bowen".

John Bowen  
MAKSolve

Environmental & Safety Consultants

261 Regency Ridge Drive Dayton, Ohio 45425 Phone: 937 815 8843 Fax: 937 860 6845



MEMO

TO Mr. Bowen  
FROM Sue Knight  
DATE March 11, 2021  
SUBJECT: PUBLIC RECORDS REQUEST – SPINNAKER COATING

In response to your public records request (attached) to Mr. Davis, the City of Troy provides the following:

- The current zoning? **M-2 Light Industrial Zoning District**
- If any code violations are on file for the subject property? **No open violations at this time**
- If the city maintains any archived building records or permits for this facility? **Yes, but cannot guarantee all records as the records retention policy is five years or no longer of administrative value.**

In response to your public records request (attached) to Ms. Showalter, the City of Troy provides the following:

- Water Connected – **9/1/1985**
- Water Violations – **None with Troy**
- Date of Sewer Hookup – **9/1/1985**
- Special Sewer Permits – **None with Troy**
- Sewer Discharge Violations – **None with Troy**
- Information regarding an current or historic septic tank systems -- **None with Troy**

Assistant City Engineer Christy Butera has provided the following:

**This site has no history of sewer or water violations with Troy. They were never required to be in the City's sanitary pretreatment program and we have no record of City enforcement actions against them at the Water Street site.**

**Miami County Health Department would be the governing agency over any wells or septic systems if they ever existed on this property.**

**USEPA should be contacted for any information regarding the Superfund site activity at this location.**

With this information, I believe the City of Troy has responded to your public records request. Should you have any questions, please do not hesitate to contact me.

Best Regards  
Sue Knight  
937-335-1725



March 9, 2021

Assistant Chief Gary Stanley  
Fire Prevention  
Troy Fire Department  
1528 North Market Street  
Troy, Ohio 45373

VIA email: [Gary.Stanley@troyohio.gov](mailto:Gary.Stanley@troyohio.gov)

**Subject Property:**     **Spinnaker Coating, former Kimberly Clark**  
                                 **518 East Water Street, Troy, OH 45373**  
                                 **Parcel ID: D08-101816**

Asst. Chief Stanley:

MAKSolve is conducting a Phase I Environmental Site Assessment of the aforementioned property. As part of the site assessment, we are requesting a records review regarding any calls, complaints, hazardous materials incidents, spills, releases, Aboveground Storage Tanks (ASTs), Underground Storage Tanks (USTs), fire code violations or other environmentally related issues that may be on file for this location.

You can send your response to my attention at [john@maksolve.com](mailto:john@maksolve.com), FAX me at 937-660-6845, or mail it to my attention at the address below.

If you have any questions regarding this submittal, please call me at 513-383-0233.

Thank you.

A handwritten signature in blue ink that reads "John Bowen".

John Bowen  
MAKSolve



**From:** [Dan Stine](#)  
**To:** [larry@maksolve.com](mailto:larry@maksolve.com)  
**Subject:** RE: Environmental Records Request-110 E Canal Street & 215 S Mulberry Street  
**Date:** Tuesday, March 17, 2020 8:24:45 AM

---

Correction to Phase I Environmental Survey:

*Reported on Tier II Hazardous Material list: Battery Acid in the amounts of - 10#; 305#; 279#; 440#; 1500#; 92#; & 309# used for Tow Motors.*

*Phase I Environmental Site Assessment for:*

*The property listed at:*

*518 East Water St.; Troy, OH. 45373*

*We have **NO** records or files of any of the following:*

*Underground Storage Tanks (UGTs) installed or removed.*

*Above Ground Storage Tanks (AGTs) installed or removed.*

*Hazardous material storage.*

*Hazardous material leaks or spills.*

*Pending violations or outstanding Fire related issues.*

*Thanks.*

***Daniel J. Stine***

**Fire Inspector / Investigator  
Troy Fire Prevention Bureau  
40 S. Stanfield Rd.  
Troy, Ohio 45373**

Office: 937-335-2227

Fire Dept: 937-335-5678

**From:** [Dan Stine](#)  
**To:** [larry@maksolve.com](mailto:larry@maksolve.com)  
**Subject:** RE: Environmental Records Request-110 E Canal Street & 215 S Mulberry Street  
**Date:** Tuesday, March 17, 2020 8:19:05 AM

---

*Phase I Environmental Site Assessment for:*

*The property listed at:*

*518 East Water St.; Troy, OH. 45373*

*We have **NO** records or files of any of the following:*

*Underground Storage Tanks (UGTs) installed or removed.*

*Above Ground Storage Tanks (AGTs) installed or removed.*

*Hazardous material storage.*

*Hazardous material leaks or spills.*

*Pending violations or outstanding Fire related issues.*

*Thanks.*

***Daniel J. Stine***

**Fire Inspector / Investigator  
Troy Fire Prevention Bureau  
40 S. Stanfield Rd.  
Troy, Ohio 45373**

Office: 937-335-2227

Fire Dept: 937-335-5678

**From:** [Dan Stine](#)  
**To:** [John Bowen](#)  
**Subject:** RE: Spinnaker Coating - FOIA  
**Date:** Wednesday, March 10, 2021 10:05:14 AM

---

*SPINNAKER COATING*

*518 E. Water St.  
Troy, OH. 45373*

*Environmental Site Assessment for the above business & location –*

*We have NO records of any calls, complaints, hazardous materials incidents, spills, releases, AGTs or UGTs, fire code violations or any other environmentally related issues at this time.*

*Thanks.*

*Daniel J. Stine*

Fire Inspector / Investigator  
Troy Fire Prevention Bureau  
40 S. Stanfield Rd.  
Troy, Ohio 45373

Office: 937-335-2227

Fire Dept: 937-335-5678

Sent from my iPhone

Begin forwarded message:

**From:** John Bowen <[john@maksolve.com](mailto:john@maksolve.com)>  
**Date:** March 9, 2021 at 3:22:12 PM EST  
**To:** Gary Stanley <[gary.stanley@troyohio.gov](mailto:gary.stanley@troyohio.gov)>  
**Subject:** Spinnaker Coating - FOIA

Please See attached freedom of information act request for Spinnaker Coating.

Thanks

John Bowen  
Vice-President of Operations  
MAKSolve, LLC  
261 Regency Ridge Drive  
Dayton, OH 45459

(937) 815-6949 - Office  
(513) 383-0233 Cell  
(937) 660-6845 – Fax  
[www.maksolve.com](http://www.maksolve.com)





March 9, 2021

Miami County Health District  
510 West Water Street, Suite 130  
Troy, OH 45373

Via Email: [info@miamicountyhealth.net](mailto:info@miamicountyhealth.net)

**Subject Property:**     **Spinnaker Coating, former Kimberly Clark**  
                                 **518 East Water Street, Troy, OH 45373**  
                                 **Parcel ID: D08-101816**

To Whom it May Concern:

MAKSolve is conducting a Phase I Environmental Site Assessment of the aforementioned property. As part of the site assessment, we are requesting a records review regarding any calls, complaints, code violations, wells or septic systems or other environmentally related issues that may be on file for this location.

You can send your response to my attention at [john@maksolve.com](mailto:john@maksolve.com), FAX me at 937-660-6845, or mail it to my attention at the address below.

If you have any questions regarding this submittal, please call me at 513-383-0233.

Thank you.

A handwritten signature in blue ink that reads "John Bowen".

John Bowen  
MAKSolve

**From:** [Ron Jackson](#)  
**To:** [larry@maksolve.com](mailto:larry@maksolve.com)  
**Cc:** [Angela Benedict](#)  
**Subject:** 518 E. Water St. Troy, OH  
**Date:** Tuesday, March 17, 2020 8:30:37 AM

---

Larry,

We have nothing on file for the above address.

*Ron Jackson R.S.*

Miami County Public Health

510 W. Water St., Suite 130

Troy, OH 45373-2985

Phone: 937-573-3539

Fax: 937-573-3502

Web: [www.miamicountyhealth.net](http://www.miamicountyhealth.net)

Email: [rjackson@miamicountyhealth.net](mailto:rjackson@miamicountyhealth.net)



---

NOTICE OF CONFIDENTIALITY: This email message, including any attached files, is intended only for the person or entity to whom it is addressed and may contain confidential and/or privileged material. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering this communication to the intended recipient, you are notified that any review, use, distribution, dissemination, downloading, copying or disclosure is strictly prohibited. If you have received this communication in error, please delete it, as well as any copies, from your system, and notify the sender by reply email. Miami County Public Health, 510 W Water Street, Troy, Ohio 45373. (937)573-3500 V, (937)573-3501 F.



## File Review Request Checklist

**Please Note:** Pursuant to Ohio Revised Code 149.43(B)(5), you are not required to fill out this checklist or otherwise provide any public records request in writing. This checklist is intended to help facilitate your public records search by listing the manner in which records are generally maintained by Ohio EPA and accessed in the ordinary course of Ohio EPA's duties.

### YOUR CONTACT INFORMATION:

**Requester Name:** John bowen **Affiliation:** MAKSolve  
**Requester Address:** 261 Regency Ridge Drive  
**City:** Dayton **State:** OH **Zip:** 45459  
**Requester Phone #:** 513-383-0233  
**Requester Email:** john@maksolve.com

### 1. RECORDS REQUESTED:

**Please list all names the facility may have operated under during the period of interest.**

**Facility or Site Names and Address:**

<u>Name</u>	<u>Address</u>	<u>City</u>	<u>County</u>
Spinnaker Coating	518 East Water Street	Troy	Miami
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.

**Facility ID No. or other identifying information:**

Parcel IDs: OHD088648282

### 2. DATE RANGE

**From:** 1900

**To:** March 2021

### 3. DIVISIONS AND MAJOR PROGRAM AREAS:

#### **Division of Air Pollution Control (DAPC):**

- ☐ Stack Tests
- ☐ Asbestos Emission Controls
- ☐ Air Permits
- ☐ Open Burning Regulation
- ☐ Ambient Air Monitoring
- ☐ Mobile Sources/Asphalt Plants
- ☐ Toxic Release Inventory
- ☐ Air Nuisance

#### **Division of Environmental Response and Revitalization (DERR):**

- ☒ Emergency Response Incident Reports
- ☒ RCRA Corrective Action Files

#### **Division of Surface Water (DSW):**

- ☒ Nonpoint Source
- ☒ NPDES/Pretreatment
- ☐ Storm Water
- ☐ Surface Water Permits to Install
- ☐ Sludge Management
- ☐ Water Quality Reports/Watershed
- ☐ Wetland and Stream Permitting (401)

#### **Division of Drinking and Ground Waters (DDAGW):**

- ☐ Monthly Operating Reports (MORs)
- ☐ Lead and Copper Files

- ☒ RCRA Groundwater Files
- ☒ RCRA Closure Files
- ☒ Voluntary Action Program (VAP) Files
- ☒ Site Assessments

- ☒ Plan approvals, well logs, etc.
- ☒ Ground Water Quality Characterization
- ☒ Underground Injection Control files

### **Division of Materials and Waste Management (DMWM):**

#### **Solid Waste Section:**

- ☐ Construction and Demolition Debris (C&DD)
- ☐ Scrap Tires
- ☐ Composting
- ☐ Open Dumping
- ☐ Infectious Waste
- ☐ Municipal Solid Waste Landfills/Incinerators
- ☐ Municipal Solid Waste Transfer Stations
- ☐ Residual/Industrial Solid Waste Landfills
- ☐ Solid Waste Management Planning
- ☐ Beneficial Use

#### **Hazardous Waste Section:**

- ☒ Cessation of Regulated Operations
- ☒ RCRA C-Hazardous Waste

### **Division of Environmental and Financial Assistance (DEFA): (Water Pollution Control Loan Fund (wastewater plants/public only); and Drinking Water Assistance Fund (drinking water plants/lines/public)).**

- |  |   |
|--|---|
| <input type="checkbox"/> Nomination  | <input type="checkbox"/> Application                  |
| <input type="checkbox"/> Facilities Plan Approval (as applicable)  | <input type="checkbox"/> PTI Approval (as applicable) |
| <input type="checkbox"/> Performance Certification Approval (as applicable)  | <input type="checkbox"/> Final Loan Agreement         |
| <input type="checkbox"/> Signed Final Exhibit  | <input type="checkbox"/> WRRSP Signed Covenants       |
| <input type="checkbox"/> WRRSP Annual Reports  |   |
| <input type="checkbox"/> STAG (project plan, proof of publication, FONSI issued by USEPA, Notification of STAG grant award from USEPA) |   |

#### **4. COMMON PUBLIC DOCUMENT TYPES**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Final Permits/Licenses/Authorizations | <input checked="" type="checkbox"/> Notices of Violation                |
| <input checked="" type="checkbox"/> Inspection Reports/Checklists         | <input checked="" type="checkbox"/> Emergency Response Incident Reports |
| <input checked="" type="checkbox"/> Director's Final Findings and Orders  | <input checked="" type="checkbox"/> Discharge Monitoring Reports (DMRs) |
| <input checked="" type="checkbox"/> District Office Investigation Reports | <input type="checkbox"/> Public Notice/Public Hearing Transcript        |
| <input type="checkbox"/> Financial Assurance Documents                    | <input type="checkbox"/> Wastewater Operator Certifications             |
| <input type="checkbox"/> Water Plant Operator Certifications              | <input checked="" type="checkbox"/> Return to Compliance Letters        |
| <input type="checkbox"/> Settlement Correspondence                        | <input checked="" type="checkbox"/> Bilateral Compliance Agreements     |
| <input type="checkbox"/> Attorney General Office Referral Letters         | <input checked="" type="checkbox"/> Environmental Covenants             |
| <input type="checkbox"/> Total Maximum Daily Load Reports                 |   |





## **Emergency Response Section - Initial Pollution Incident Report (IPIR)**

3/10/2021

Spill Id Number: 9805-55-2038//0

District: SW

**Reported By:** RON KLENK

**Title:** ENGINEER

**Telephone:** (937) 332-6584 **ext:**

**Affiliation:** COMPANY

**Reported:** 05/22/1998 15:34

**Discovered:** 05/14/1998 12:00

**Occurred:** 00/00/0000

**Chronic:** N

**County:** MIAMI

**City/Township:** TROY

**Did Spiller Report ?** Y

**Complaint ?** N

**Received By:** HOLMES, CHRIS

**Priority:** 3

**Local EPC ?** N

**Did you tell the Spiller to Call the N.R.C ?** N

**Business:** Y

**SARA Report:** Y

**Suspected Spiller:** SPINNAKER COATING

**Mailing Address:** 518 E WATER ST

TROY, OH 45373

**Telephone:** (000) 000-0000 **ext:**

**Location:** 518 E WATER ST

**Source:** FIXED FACILITY - INDUSTRY - STACK RELEASE-AIR

**Cause:** PROCESS MALFUNCTION

**Reason:** BREAK OR BROKEN

**Waterways Affected:** N/A

**Media Affected 1:** AIR

**Media Affected 2:**

**Media Affected 3:**

### **Product(s) Spilled**

Product	Amount	UOM	RQ	Size	Type	EHS
TOLUENE	.0	UNK	.0	U	C	N

### **Other Agencies Notified**

Agency	Person	Date	Time
RTK	LUFKIN	00/00/0000	
DAPC	HINNRIHS	00/00/0000	
DHWM	PARDI	00/00/0000	
LOCAL APC	FAXED	00/00/0000	

### **Remark**

UNK AMOUNT OF TOLUENE RELEASED FROM EQUIPMENT FAILURE. RELEASED OCCURRED WITH THE PAPER COATING PROCESS. COMPANY WILL CONTINUE TO INVESTIGATE AND NOTIFY OF FINAL AMOUNT OF MATERIAL RELEASED.

## Emergency Response Section - Initial Pollution Incident Report (IPIR)

3/10/2021

Spill Id Number: 9805-55-2134//0

District: SW

**Reported By:** CINDY GERNIGAN

**Title:** ENVIRONMENTAL

**Telephone:** (770) 587-7014 **ext:**

**Affiliation:** COMPANY

**Reported:** 05/28/1998 16:20

**Discovered:** 05/28/1998 11:30

**Occurred:** 05/06/1998

**Chronic:** N

**County:** MIAMI

**City/Township:** TROY

**Did Spiller Report ?** Y

**Complaint ?** N

**Received By:** HOLMES, CHRIS

**Priority:** 4

**Local EPC ?** N

**Did you tell the Spiller to Call the N.R.C ?** N

**Business:** N

**SARA Report:** N

**Suspected Spiller:** KIMBERLY CLARK CORP/ BROWN BRIDGE IN

**Mailing Address:** 518 E WATER ST

TROY, OH 45373

**Telephone:** (000) 000-0000 **ext:**

**Location:** 518 E WATER ST

**Source:** FIXED FACILITY - INDUSTRY - WASTE SYSTEM

**Cause:** PERMIT VIOLATION

**Reason:** UNKNOWN REASONS

**Waterways Affected:** GREAT MIAMI RIVER

**Media Affected 1:** SURFACE WATER/STORM

**Media Affected 2:**

**Media Affected 3:**

### **Product(s) Spilled**

Product	Amount	UOM	RQ	Size	Type	EHS
WASTE WATER	.0	UNK	.0	U	WW	N

### **Other Agencies Notified**

Agency	Person	Date	Time
DSW/WW	BURT	00/00/0000	

### **Remark**

NPDES VIOLATION FOR TOLUENE. LIMIT 10 PPB AND THE READING WAS 12 PPB. COMPANY WILL SEND A LETTER TO THE DISTRICT OFFICE.

**BEFORE THE**  
**OHIO ENVIRONMENTAL PROTECTION AGENCY**

OHIO E.P.A.  
MAR 13 2001  
ENTERED DIRECTOR'S JOURNAL

**In the Matter of:**

**Kimberly-Clark Corporation  
1400 Holcomb Bridge Road  
Roswell, Georgia 30076-2199**

**Director's Final  
Findings and Orders**

**I. JURISDICTION**

1. These Director's Final Findings and Orders ("Orders") are issued pursuant to the authority vested in the Director of the Ohio EPA under Sections 3734.13, 3734.20, 6111.03, and 3745.01 of the Ohio Revised Code.

**II. PARTIES BOUND**

2. These Orders shall apply to and be binding upon Kimberly-Clark Corporation ("Kimberly-Clark"), its agents, successors, and assigns.

3. No change in ownership or corporate status of Kimberly-Clark including, but not limited to, any transfer of assets or real or personal property shall in any way alter Kimberly-Clark's obligations under these Orders.

4. Kimberly-Clark shall provide a copy of these Orders to all contractors, subcontractors, laboratories and consultants retained to perform any portion of the Work performed pursuant to these Orders. Kimberly-Clark shall ensure that all contractors, subcontractors, laboratories and consultants retained to perform Work pursuant to these Orders comply with the provisions of these Orders.

**III. DEFINITIONS**

5. Unless otherwise expressly provided herein, terms used in these Orders or in any appendices shall have the same meaning as used in Chapters 3734 and 6111 of the Ohio Revised Code. Whenever the terms listed below are used in these Orders or in any appendices, attached hereto and incorporated herein, the following definitions shall apply:

a. "Day" shall mean a calendar day unless expressly stated to be a business day. "Business day" shall mean a day other than a Saturday, Sunday, or State Holiday. In computing any period of time under these Orders, where the last day would fall on a Saturday, Sunday, or State Holiday, the period shall run until the close of the next business day.

b. "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan, codified at 40 C.F.R. Part 300 (1990), as amended.

c. "Ohio EPA" shall mean the Ohio Environmental Protection Agency and its designated representatives.

d. "Paragraph" shall mean a portion of these Orders identified by an Arabic numeral or an upper or lower case letter.

e. "Parties" shall mean Kimberly-Clark and the Ohio EPA.

f. "Risk Assessment Guidance for Superfund" ("**RAGS**") shall mean RAGS: Volume 1 - Human Health Evaluation Manual, Part B, Development of Risk-based Preliminary Remediation Goals, OSWER Directive 9285.7-01B, December, 1991, Interim attached hereto and incorporated herein as Attachment B of these Orders.

g. "Section" shall mean a portion of these Orders identified by a roman numeral.

h. "Site" shall mean the property located at 518 East Water Street, Troy, Miami County, Ohio, commonly referred to as "Brown-Bridge Plant 1," where the treatment, storage, and/or disposal of hazardous waste, and/or the discharge into waters of the state of industrial waste or other waste has occurred, including any other area where such hazardous wastes, industrial wastes, and/or other wastes have migrated or threaten to migrate.

i. "Waste Material" shall mean (1) any "hazardous waste" under Section 3734.01(J) of the Ohio Revised Code; (2) any "solid waste" under Section 3734.01(E) of the Ohio Revised Code; (3) any "industrial waste" under Section 6111.01(C) of the Ohio Revised Code; and (4) any "other waste" under Section 6111.01(D) of the Ohio Revised Code.

j. "Work" shall mean all activities Kimberly-Clark is required to perform under these Orders.

#### **IV. FINDINGS OF FACT, DETERMINATIONS, AND CONCLUSIONS OF LAW**

6. All findings of fact, determinations, and conclusions of law necessary for the issuance of these Orders pursuant to Sections 3734.13, 3734.20, 3745.01 and 6111.03 of the Ohio Revised Code have been made and are outlined below. Ohio EPA has determined the following:

a. Kimberly-Clark acquired the property located at 518 East Water Street in Troy, Miami County, Ohio (the "Site") as a result of a merger with Brown-Bridge Mills, Inc. on December 31, 1977. The Site consists of approximately 5 acres of land adjacent to the flood plain of the Great Miami River. Prior to September, 1994, the Site was used for the manufacture of pressure, moisture, and heat sensitive stock for labels, stamps, and related items.

b. Brown-Bridge Industries acquired the Site from Kimberly-Clark on September 16, 1994. In 1998, Brown-Bridge Industries changed its name to Spinnaker Coating, Inc. ("Spinnaker"). Spinnaker continues to utilize this facility for the manufacture of pressure, moisture, and heat sensitive stock for labels, stamps, and related items.

c. Toluene, as product, was stored in bulk tanks at the bulk storage area at the west end of the Site. The Site formerly contained a toluene recovery system at the west end which included a 3000 gallon flow through process tank. The flow through process tank was removed in 1988.

d. There are known to have been at least four instances of releases at the Site, including the following:

i. According to Kimberly-Clark, during due diligence interviews associated with the sale of the Site to Brown-Bridge, it was discovered that in 1986 or 1987, approximately 15 to 25 gallons of toluene overflowed from a virgin toluene tank at the bulk chemical storage tank location on the Site's west end.

ii. According to Kimberly-Clark, in July, 1988, above-ground piping to a toluene storage tank was found to be leaking during a regularly scheduled tank-tightness test. The quantity discharged during this release has not been determined.

iii. According to an initial pollution incident report prepared by Ohio EPA, an



estimated 4000 pounds of toluene leaked into the atmosphere over several days prior to its discovery on April 12, 1989. The leak apparently was due to a malfunctioning steam valve at the toluene recovery system.

iv. According to an initial pollution incident report prepared by Ohio EPA, an estimated 500 gallons of toluene leaked from the toluene recovery system to the ground underneath the system on January 25, 1994.

e. Analysis of ground-water samples from the Site conducted by Kimberly-Clark in October, 1993 and July, 1994 showed the presence of the following compounds at levels presented below:

Chemical	Concentration ( $\mu\text{g/l}$ )
Toluene	320,000
Benzene	62
1,1,1-Trichloroethane	270
Tetrachloroethene	28
Trichloroethene	400
Vinyl Chloride	170
Cis-1,2-dichloroethene	230

f. Contaminated ground water at the Site is located approximately 900 feet upgradient from a City of Troy production well. According to the City's well head protection program, the Site is located within the one-year capture zone of the City's well field.

g. Kimberly-Clark's consultant, Applied Engineering & Science, Inc. (AES), in a report dated August, 1994, determined that ground-water contamination is migrating downgradient in a northeasterly direction off the Site onto adjacent property.

h. Two areas of soil and ground water contamination, on the east and west portions of the property, were identified by AES.

i. In April 1995, approximately 1525 cubic yards of contaminated soils were excavated and removed from the bulk storage and nonhazardous waste storage areas of the Site. Soil samples collected from these areas contained trichloroethene at concentrations up to 29,000  $\mu\text{g}/\text{kg}$ , 1,1,1-trichloroethane at concentrations up to 1400  $\mu\text{g}/\text{kg}$ , and tetrachloroethene at concentrations up to 790  $\mu\text{g}/\text{kg}$ .

j. The material excavated from the bulk storage area was placed in roll-off containers. One container was manifested as hazardous waste due to its trichloroethene content.

k. In the summer of 1995, a ground water treatment system was installed on the west end of the property and an air sparging/vapor extraction system was installed on the east end. Both systems began operation on September 6, 1995.

l. In February 1997, Kimberly-Clark and Brown-Bridge determined that, according to ground water monitoring, their cleanup goals had been reached for the east end. The air sparging stopped in March 1997, while vapor extraction continued until January 1998.

m. The West End pump-and-treat system consists of four pumping wells and an air stripper to treat the water. The treated water was discharged to the Great Miami River under a NPDES discharge permit.

n. Ohio EPA invited Kimberly-Clark to negotiate an administrative order for the performance of a Remedial Investigation and Feasibility Study ("RI/FS") in 1997. At that time, Kimberly-Clark declined to enter into the administrative order stating that "continuation of the voluntary cleanup appears to be the most cost effective way to insure completion of the Site cleanup." Ohio EPA decided to change the scope of work from an RI/FS to operation and maintenance of the West End pump and treat system, with a provision for periodic evaluation of the effectiveness of the system. Kimberly-Clark declined to enter into an order that included the evaluation of effectiveness provision.

o. In a letter dated February 14, 2001, Kimberly-Clark stated that it had "completed the soil and ground water remediation project at Spinnaker Coating Facility ..." and that it planned to shut down the system on March 1, 2001. In response to this letter, Ohio EPA sent correspondence to Kimberly-Clark on February 27, 2001 asking that the system not be shut down because of concerns that the City of Troy's public water supply wells could be jeopardized. Ohio EPA suggested that a meeting take place before any action was taken and asked for possible dates to meet. On March 1, 2001, Kimberly-Clark proceeded to shut down the pump and treat system without waiting to meet with Ohio EPA to hear Ohio EPA's concerns.

p. Kimberly-Clark collected ground-water samples on a quarterly basis from the pumping wells and monitoring wells at the Site. The analytical results for vinyl chloride from pumping wells 3 and 4 and vinyl chloride and trichloroethene from pumping well 3 and monitoring well KMW-9 for the years 1999 and 2000 follow. The results show that the concentrations of vinyl chloride and trichloroethene exceed Federal and state drinking water maximum contaminant levels (MCLs). Pumping wells 3 and 4 and monitoring well KMW-9 lie between the bulk storage area and Troy's east well field.

*Vinyl Chloride*

<i>Well</i>	3/15/99	6/16/99	9/2/99	12/16/99	3/1/00	6/6/00	9/7/00	12/13/00
PW-3	<b>6</b>	<b>7</b>	<b>13</b>	n	<b>2.0</b>	<b>6.7</b>	<b>9.2</b>	<b>8.0</b>
PW-4	n	<b>3</b>	1	1.1	n	n	n	<b>3.7</b>

*Trichloroethene*

<i>Well</i>	3/15/99	6/16/99	9/2/99	12/16/99	3/1/00	6/6/00	9/7/00	12/13/00
PW-3	3	<b>9</b>	3	1.1	2.1	3.4	<b>12</b>	<b>9.5</b>
KMW-9	1	<b>12</b>	n	<b>7.8</b>	2.6	n	<b>16</b>	<b>7.4</b>

Notes:

All values are in  $\mu\text{g/l}$ .

n - not detected

**Boldface** denotes values greater than federal and state drinking water MCLs.

The MCL for vinyl chloride is  $2.0 \mu\text{g/l}$ .

The MCL for trichloroethene is  $5.0 \mu\text{g/l}$ .

q. On May 23, 24 and 25, 2000, Ohio EPA collected ground-water samples from borings RS02, RS03, RS04, and RS06 along the northeast side of the Spinnaker building between the facility and Troy's east well field. Trichloroethene was detected in boring RS02 at  $72 \mu\text{g/l}$ , in boring RS03 at  $70 \mu\text{g/l}$ , in boring RS04 at  $5 \mu\text{g/l}$ , and in boring RS06 at  $9.6 \mu\text{g/l}$ . Vinyl chloride was detected in boring RS04 at  $3.5 \mu\text{g/l}$  and in boring RS06 at  $2.8 \mu\text{g/l}$ .

r. Trichloroethene and tetrachloroethene in soil and ground water will degrade to form cis-1,2-dichloroethene. Analysis performed during the excavation and removal of soils from the Site did not include cis-1,2-dichloroethene, which has been detected in Site wells. Generally, wells downgradient from the bulk storage and nonhazardous waste storage areas have shown higher concentrations of cis-1,2-dichloroethene than upgradient

wells.

s. The City of Troy analyzes its well water for volatile organic compounds periodically (generally, once per quarter). Cis-1,2-dichloroethene has been detected in Troy's east well field since 1988. Trichloroethene was detected in the east well field in 1990.

t. Ohio EPA conducted a pump test of the aquifer beneath the Site in November, 2000. The pump test demonstrated that shallow ground water beneath the Site is hydraulically connected to Troy's east well field, that contaminants in ground water at the Site will migrate to the east well field, and that the Great Miami River does not form a hydraulic barrier preventing the migration of contaminants from the site to the east well field.

u. Without the operation of the ground-water pump and treat system, increased concentrations of trichloroethene, cis-1,2-dichloroethene, and vinyl chloride will migrate to Troy's east well field.

v. Kimberly-Clark is a "person" as defined under Section 3734.01(G) of the Ohio Revised Code.

w. Because of their quantity, concentration, or physical or chemical characteristics, the Director has determined that toluene, benzene, 1,1,1-trichloroethane, tetrachloroethene, trichloroethene, vinyl chloride, cis-1,2-dichloroethene and other contaminants found at the Site are "hazardous wastes" as defined under Section 3734.01(J) of the Ohio Revised Code.

x. The Site is a hazardous waste facility, solid waste facility, or other location where hazardous waste was treated, stored, or disposed.

y. Conditions at the Site constitute a substantial threat to public health or safety or are causing or contributing or threatening to cause or contribute to air or water pollution or soil contamination.

z. Kimberly-Clark is a "person" as defined under Section 6111.01(I) of the Ohio Revised Code.

aa. The toluene, benzene, 1,1,1-trichloroethane, tetrachloroethene, trichloroethene, vinyl chloride, cis-1,2-dichloroethene, and other contaminants found at the Site are "industrial wastes" or "other wastes" as defined under Section 6111.01 of the Ohio

Revised Code.

bb. The ground water and surface water at the Site are "waters of the state" as defined under Section 6111.01(H) of the Ohio Revised Code.

cc. The Work required by these Orders will contribute to the prohibition or abatement of the discharge of industrial wastes or other wastes into the waters of the state.

dd. In issuing these Orders, the Director has given consideration to, and based his determination on, evidence relating to the technical feasibility and economic reasonableness of complying with these Orders and to evidence relating to conditions calculated to result from compliance with these Orders, and their relation to benefits to the people of the state to be derived from such compliance.

ee. Based upon information available to the Director as set forth in these Findings of Fact, the Director has determined that the work required by these Orders, set forth below, is in the nature of interim measures only, designed to contain, abate, mitigate and control contamination. The Director has given consideration to the evidence related to documented activities which have occurred and/or will occur at the Site. Based upon the facts presented, the Director believes that issuance of these Orders is furthering the intent of the General Assembly, that Ohio EPA will prevent, control or abate pollution of the environment for the protection and preservation of the health, safety, welfare and property of the people of the State.

## **V. GENERAL PROVISIONS**

### **7. Objectives of the Orders**

The objective of the Ohio EPA in issuing these Orders is to contribute to the protection of public health, safety, and welfare and the environment from the disposal, discharge, or release of Waste Material at the Site through the continued implementation and monitoring of the West End ground water pump and treatment system by Kimberly-Clark. Kimberly-Clark shall perform the Work in accordance with these Orders, including but not limited to, relevant guidance documents, and all standards, specifications, and schedules set forth in or developed pursuant to these Orders.

### **8. Compliance With Law**

a. All activities undertaken by Kimberly-Clark pursuant to these Orders shall be performed in accordance with the requirements of all applicable federal and state laws



and regulations.

b. Kimberly-Clark shall perform the activities required pursuant to these Orders in a manner which is not inconsistent with the NCP.

c. Where any portion of the Work requires a permit or approval, Kimberly-Clark shall timely submit applications and take all other actions necessary to obtain such permits or approval. These Orders are not, and shall not be construed to be, a permit issued pursuant to any statute or regulation.

## **VI. PERFORMANCE OF THE WORK**

9. Within five (5) days of the issuance of these Orders, Kimberly-Clark shall resume operation of the existing West End ground-water pump and treatment system described in the Site Remediation Report, found in Attachment A, until such time as the interim action ground-water compliance (IAGWC) standards described in Section VI., Paragraph 16 (a-d) of these Orders, are met and confirmed by the Ohio EPA. Kimberly-Clark shall maintain the West End ground water pump and treat system during its operation.

10. Kimberly-Clark shall evaluate the effectiveness of the West End ground-water pump and treatment system in preventing further migration of contamination from sources at the Site in accordance with the following provisions:

- a. Within 45 days of the issuance of these Orders, Kimberly-Clark shall submit a work plan for evaluating the effectiveness of the West End ground-water pump and treatment system in preventing further migration of contamination from sources at the Site. The evaluation shall include the measurement of aquifer properties at the Site including vertical and horizontal hydraulic conductivity, specific yield, and gradient. The evaluation shall estimate the capture zone of the pumping wells using both empirical data collected from the Site and mathematical modeling. All models used to estimate the capture zones of the pumping wells shall be calibrated and verified. Scale drawings showing the estimated vertical and horizontal extent of the capture zones for the pumping wells shall be prepared. The work plan shall include a fixed-date schedule for conducting the evaluation and submitting a final report on the evaluation to Ohio EPA.
- b. The work plan and final report shall be subject to the review, approval, or disapproval of Ohio EPA, in accordance with the provisions set

forth in Section XI of these Orders.

- c. Upon Ohio EPA's approval of the work plan, Kimberly-Clark shall implement the Work detailed therein in accordance with the schedule contained in the approved work plan.

11. Kimberly-Clark shall collect and analyze ground-water samples from all operating pumping wells on a quarterly basis.

12. Kimberly-Clark shall collect and analyze ground-water samples from the following Site wells on a quarterly basis: PW-1, PW-2, PW-3, PW-4, KMW-5, KMW-6, KMW-7, KMW-8, KMW-9, EEIB-2, EEIB-4, EEIB-12, GZA-1, RS04, and RS06.

13. Kimberly-Clark shall continue to collect water level measurements from the following Site wells on a quarterly basis: PW-1, PW-2, PW-3, PW-4, KMW-1, KMW-2, KMW-3, KMW-4, KMW-5, KMW-6, KMW-7, KMW-8, KMW-9, EEIB-2, EEIB-4, EEIB-7, EEIB-8, EEIB-9, EEIB-11, EEIB-12, GZA-1, GZA-2, RS04, and RS06.

14. Ground water samples shall be analyzed by EPA Method SW846-8260, with low detection limits (25 ml purge).

15. Ohio EPA may modify any portion of the ground-water monitoring program. Ohio EPA shall notify Kimberly-Clark in writing if any such modifications are determined to be warranted.

16. **IAGWC** standards shall be determined according to the following procedure:

- a. The Site contaminants of concern ("**COC**") are trichloroethene and vinyl chloride.
- b. For each COC, identify the corresponding maximum contaminant level ("**MCL**") and calculate the residential water carcinogenic effects remediation goal ( $10^{-5}$ ) and the residential water non-carcinogenic effects remediation goal ( $HI=1$ ) using equations 1' and 2' on pages 21 and 22 of the Risk Assessment Guidance for Superfund, Part B, found in Attachment B of these Orders. When using equation 1', substitute a target excess individual lifetime cancer risk value of  $10^{-5}$  into the equation.
- c. For each COC, select the lowest concentration from among the MCL,

the carcinogenic risk-based remediation goal, and the non-carcinogenic risk-based remediation goal.

- d. The value obtained in item "c" above becomes the IAGWC standard unless the value is less than 1.0 part per billion in which case 1.0 part per billion becomes the IAGWC standard.

17. Kimberly-Clark may petition the Ohio EPA to cease operation of the West End ground-water pump and treatment system should ground-water sampling and analysis indicate that the concentrations of each COC are less than the IAGWC standards for four consecutive quarters in the following wells: PW-1, PW-2, PW-3, PW-4, KMW-6, KMW-7, KMW-8, KMW-9, EEIB-2, EEIB-12, RS04, and RS06. Kimberly-Clark shall resample the ground-water approximately one week following receipt of the fourth consecutive quarter's sampling results to confirm whether the concentrations of each COC are less than the IAGWC standards. Following receipt of written concurrence from the Ohio EPA that the concentrations of each COC are less than the IAGWC standards, Kimberly-Clark may cease operation of the West End ground-water pump and treatment system.

18. Following the Ohio EPA-approved cessation of operation of the West End ground-water pump and treatment system, Kimberly-Clark shall continue to maintain the treatment system in such a manner as to allow for the resumed operation of the treatment system, if resumed operation of the system is required by Ohio EPA due to any exceedance of the IAGWC standards.

19. Following Ohio EPA-approved cessation of operation of the West End ground-water pump and treatment system, Kimberly-Clark shall continue ground-water analytical sampling on a quarterly basis for Site wells listed in Section VI., Paragraphs 12 and 13 of these Orders. If Kimberly-Clark's sampling results indicate that IAGWC standards have been exceeded during any sampling event, Kimberly-Clark shall resample the ground water approximately one week following receipt of the initial sampling results to confirm whether IAGWC standards have been exceeded. If the resampling results confirm that the IAGWC standards have been exceeded, Kimberly-Clark shall resume operation of the West End ground-water pump and treatment system, including the resumption of quarterly water level measurements, and continue quarterly ground-water analytical sampling. Kimberly-Clark shall notify Ohio EPA within twenty-four (24) hours of the resumption of operation of the treatment system if the sampling and resampling, as described above, show that the IAGWC standards have been exceeded.

20. These Orders shall not be eligible for termination pursuant to Section XVI, Termination, until eight (8) consecutive quarters of ground-water sampling and analysis

have demonstrated continued compliance with the IAGWC standards.

## **VII. SAMPLING AND DATA AVAILABILITY**

21. Kimberly-Clark shall notify Ohio EPA not less than fifteen (15) days in advance of all sample collection activity. Kimberly-Clark shall allow split and/or duplicate samples to be taken by Ohio EPA. Ohio EPA shall also have the right to take any additional samples it deems necessary.

22. Within seven (7) days of a request by Ohio EPA, Kimberly-Clark shall submit to Ohio EPA copies of the results of all sampling and/or tests or other data, including raw data and original laboratory reports, generated by or on behalf of Kimberly-Clark with respect to the Site and/or the implementation of these Orders. Kimberly-Clark may submit to Ohio EPA any interpretive reports and written explanations concerning the raw data and original laboratory reports. Such interpretive reports and written explanations shall not be submitted in lieu of original laboratory reports and raw data. Should Kimberly-Clark subsequently discover an error in any report or raw data, Kimberly-Clark shall promptly notify Ohio EPA of such discovery and provide the correct information within seven (7) days.

## **VIII. ACCESS**

23. Ohio EPA shall have access at all times to the Site and any other property to which access is required for the implementation of these Orders, to the extent access to the property is controlled by Kimberly-Clark. Access under these Orders shall be for the purposes of conducting any activity related to these Orders including, but not limited to the following:

- a. monitoring the Work;
- b. conducting sampling;
- c. inspecting and copying records, operating logs, contracts, and/or other documents related to the implementation of these Orders;
- d. conducting investigations and tests related to the implementation of these Orders; and
- e. verifying any data and/or other information submitted to Ohio EPA.

24. To the extent that the Site or any other property to which access is required for the implementation of these Orders is owned or controlled by persons other than Kimberly-Clark, Kimberly-Clark shall use its best efforts to secure from such persons access for Kimberly-Clark and Ohio EPA as necessary to effectuate these Orders. Copies of all access agreements obtained by Kimberly-Clark shall be provided promptly to Ohio EPA. If any access required to effectuate these Orders is not obtained within thirty (30) days of the effective date of these Orders, or within thirty (30) days of the date Ohio EPA notifies Kimberly-Clark in writing that additional access beyond that previously secured is necessary, Kimberly-Clark shall promptly notify the Ohio EPA in writing of the steps Kimberly-Clark has taken to attempt to obtain access.

25. Notwithstanding any provision of these Orders, the State of Ohio retains all of its access rights and authorities, including enforcement authorities related thereto, under any applicable statute or regulations.

#### **IX. DESIGNATED SITE COORDINATORS**

26. Within five (5) days of the effective date of these Orders, Kimberly-Clark shall notify Ohio EPA, in writing, of the name, address and telephone number of its designated Site Coordinator and Alternate Site Coordinator. If a designated Site Coordinator or Alternate Site Coordinator is changed, the identity of the successor shall be given to the other Party at least five (5) days before the changes occur, unless impracticable, but in no event later than the actual day the change is made.

27. To the maximum extent practicable, except as specifically provided in these Orders, communications between Kimberly-Clark and Ohio EPA concerning the implementation of these Orders shall be made between the Site Coordinators. Kimberly-Clark's Site Coordinator shall be available for communication with Ohio EPA regarding the implementation of these Orders for the duration of these Orders. Each Site Coordinator shall be responsible for assuring that all communications from the other Party are appropriately disseminated and processed. Kimberly-Clark's Site Coordinator or alternate shall be present on the Site or on call during all hours of Work at the Site.

28. Without limitation of any authority conferred on Ohio EPA by statute or regulation, Ohio EPA Site Coordinator's authority includes, but is not limited to the following:

a. taking samples and directing the type, quantity and location of samples to be taken by Kimberly-Clark pursuant to an approved work plan;



b. observing, taking photographs, or otherwise recording information related to the implementation of these Orders, including the use of any mechanical or photographic device;

c. directing that the Work stop whenever the Site Coordinator for Ohio EPA determines that the activities at the Site may create or exacerbate a threat to public health or safety, or threaten to cause or contribute to air or water pollution or soil contamination;

d. conducting investigations and tests related to the implementation of these Orders;

e. inspecting and copying records, operating logs, contracts and/or other documents related to the implementation of these Orders; and

f. assessing Kimberly-Clark's compliance with these Orders.

#### **X. PROGRESS REPORTS AND NOTICE**

29. Unless otherwise directed by Ohio EPA, Kimberly-Clark shall provide quarterly progress reports to the Ohio EPA concerning the work carried out by Kimberly-Clark during the previous quarter. The quarters shall be divided into the following reporting periods: the First Quarter shall be months January through March; the Second Quarter shall be months April through June; the Third Quarter shall be months July through September; and the Fourth Quarter shall be months October through December. The quarterly progress reports shall be submitted by the tenth (10) day of the first month following the reporting period. The quarterly progress reports shall include, at a minimum, the following information:

a. a description of the status of the Work and progress to date;

b. summaries of all changes made in the interim measures during the reporting period;

c. summaries of all contacts with representatives of the City of Troy, local community, public interest groups, county and state agencies, and government during the reporting period concerning the Work being done as a result of these Orders;

d. summaries of all relevant findings including, but not limited to, water level measurements, flow maps, etc., from Site wells listed in Section VI., Paragraph 13 of these

Orders;

e. summaries of all relevant findings including, but not limited to, analytical sampling results, etc., from Site wells listed in Section VI., Paragraphs 11 and 12 of these Orders;

f. an accounting of how much contaminated ground water was pumped during the reporting period;

g. a description of the difficulties encountered during the reporting period;

h. a description of the actions taken to rectify any difficulties encountered;

i. a description of activities planned for the next quarter; and

j. an identification of changes in key project personnel.

30. Progress reports and all other documents required to be submitted pursuant to these Orders shall be sent by certified mail return receipt requested, or equivalent, to the following address, or to such other address as directed by Ohio EPA:

Ohio Environmental Protection Agency  
Lazarus Government Center  
P.O. Box 1049  
Columbus, Ohio 43216-1049  
ATTN: DERR Records Room

Ohio EPA  
Southwest District Office  
401 East Fifth Street  
Dayton, Ohio 45402  
ATTN: Brown Bridge Site Coordinator, DERR

## **XI. REVIEW OF SUBMITTALS**

31. Ohio EPA will review any work plan, report, or other item required to be submitted pursuant to these Orders. Upon review, Ohio EPA may in its sole discretion: (a) approve the submission in whole or in part; (b) approve the submission upon specified conditions; (c) modify the submission; (d) disapprove the submission in whole or in part, notifying Kimberly-Clark of deficiencies; or (e) any combination of the above.

32. In the event of Ohio EPA's approval, approval upon condition, or modification of any submission, Kimberly-Clark shall proceed to take any action required by the submission as approved, conditionally approved, or modified by Ohio EPA.

33. In the event that Ohio EPA initially disapproves a submission, in whole or in part, and notifies Kimberly-Clark of the deficiencies, Kimberly-Clark shall, within fourteen (14) days, or such longer period of time as specified by Ohio EPA in writing, correct the deficiencies and resubmit to Ohio EPA for approval a revised submission. The revised submission shall incorporate all of the changes, additions, and/or deletions specified by Ohio EPA in its notice of deficiency. Notwithstanding the notice of deficiency, Kimberly-Clark shall proceed to take any action required by a non-deficient portion of the submission.

34. In the event that Ohio EPA disapproves a revised submission, in whole or in part, Ohio EPA may require Kimberly-Clark to correct the deficiencies and incorporate all changes, additions, and/or deletions within fourteen (14) days, or such period of time as specified by Ohio EPA in writing. Or, in the alternative, Ohio EPA retains the right to terminate these Orders, perform any additional remediation, conduct further Investigation, and/or enforce the terms of these Orders.

35. All work plans, reports, or other items required to be submitted to Ohio EPA under these Orders shall, upon approval by Ohio EPA, be deemed to be incorporated in and made an enforceable part of these Orders. In the event that Ohio EPA approves a portion of a work plan, report, or other item, the approved portion shall be deemed to be incorporated in and made an enforceable part of these Orders.

## **XII. RESERVATION OF RIGHTS**

36. Ohio EPA reserves the right to seek legal and/or equitable relief to enforce the terms and conditions of these Orders, including penalties against Kimberly-Clark for noncompliance with these Orders.

37. Ohio EPA reserves the right to terminate these Orders and/or perform all or any portion of the Work or any other measures, including but not limited to conducting further investigation and/or remediation, in the event that the requirements of these Orders are not wholly complied with within the time frames required by these Orders.

38. Ohio EPA reserves the right to take any action, including but not limited to any enforcement action, action to recover costs, or action to recover damages to natural

resources, pursuant to any available legal authority as a result of past, present, or future violations of state or federal laws or regulations or the common law, and/or as a result of events or conditions arising from, or related to, the Site. Upon termination of these Orders pursuant to Section XVI, Termination, Kimberly-Clark shall have resolved its liability to Ohio EPA only for the Work performed pursuant to these Orders.

### **XIII. ACCESS TO INFORMATION**

39. Kimberly-Clark shall provide to Ohio EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to events or conditions at the Site including, but not limited to manifests, reports, correspondence, or other documents or information related to the Work.

40. Kimberly-Clark may assert a claim that documents or other information submitted to the Ohio EPA pursuant to these Orders is confidential under the provisions of Rule 3745-50-30(A) of the Ohio Administrative code or Section 6111.05(A) of the Ohio Revised Code. If no such claim of confidentiality accompanies the documents or other information when it is submitted to Ohio EPA, it may be made available to the public without notice to Kimberly-Clark.

41. Kimberly-Clark may assert that certain documents or other information are privileged under the attorney-client or any other privilege recognized by state law. If Kimberly-Clark makes such an assertion, it shall provide Ohio EPA with the following: (1) the title of the document or information; (2) the date of the document or information; (3) the name and title of the author of the document or information; (4) the name and title of each addressee and recipient; (5) a general description of the contents of the document or information; and (6) the privilege being asserted by Kimberly-Clark.

42. No claim of confidentiality shall be made with respect to any data, including but not limited to, all sampling, analytical monitoring, or laboratory or interpretive reports.

43. Kimberly-Clark shall preserve for the duration of these Orders and for a minimum of ten (10) years after its termination, all documents and other information within its possession or control, or within the possession or control of its contractors or agents, which in any way relate to the Work, notwithstanding any document retention policy to the contrary. Kimberly-Clark may preserve such documents by microfiche, or other electronic or photographic device. At the conclusion of this document retention period, Kimberly-Clark shall notify Ohio EPA at least sixty (60) days prior to the destruction of these documents or other information; and upon request, shall deliver such documents and other

information to Ohio EPA.

#### **XIV. OTHER CLAIMS**

44. Nothing in these Orders shall constitute or be construed as a release from any claim, cause of action, or demand in law or equity against any person, firm, partnership, or corporation, not subject to these Orders for any liability arising from, or related to, events or conditions at the Site.

#### **XV. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION**

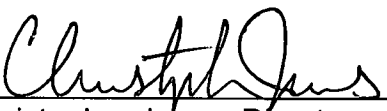
45. The effective date of these Orders shall be the date on which these Orders are entered in the Journal of the Director of Ohio EPA.

46. These Orders may be modified by Ohio EPA. Modifications shall be in writing and shall be effective on the date entered in the Journal of the Director of Ohio EPA.

#### **XVI. TERMINATION**

47. These Orders shall terminate upon Ohio EPA's approval in writing of Kimberly-Clark's written certification to Ohio EPA that all Work required to be performed under these Orders has been completed. The termination of these Orders shall not affect the terms and conditions of Section XII, Reservation of Rights, Section XIII, Access to Information, and Section XIV, Other Claims.

**IT IS SO ORDERED:**

  
\_\_\_\_\_  
Christopher Jones, Director  
Ohio Environmental Protection Agency

3-12-01  
\_\_\_\_\_  
Date



**RECEIVED  
OHIO EPA**

**APR 22 1998**

**SOUTHWEST DISTRICT**

**APPLIED  
ENGINEERING &  
SCIENCE, INC.**

**SOIL SAMPLING  
RESULTS  
HOBART UST  
AND RAIL SPUR  
PROPERTY**

**Brown-Bridge  
Facility**

**Troy, Ohio**

**Kimberly-Clark  
Corporation**

**June 1994**

**SOIL SAMPLING RESULTS  
HOBART UST AND RAIL SPUR PROPERTY**

**BROWN-BRIDGE FACILITY**

**TROY, OHIO**

**Prepared for:**

**KIMBERLY-CLARK CORPORATION**

**June, 1994**



**Prepared by:**

**Applied Engineering & Science, Inc.  
Atlanta, Georgia**

## TABLE OF CONTENTS

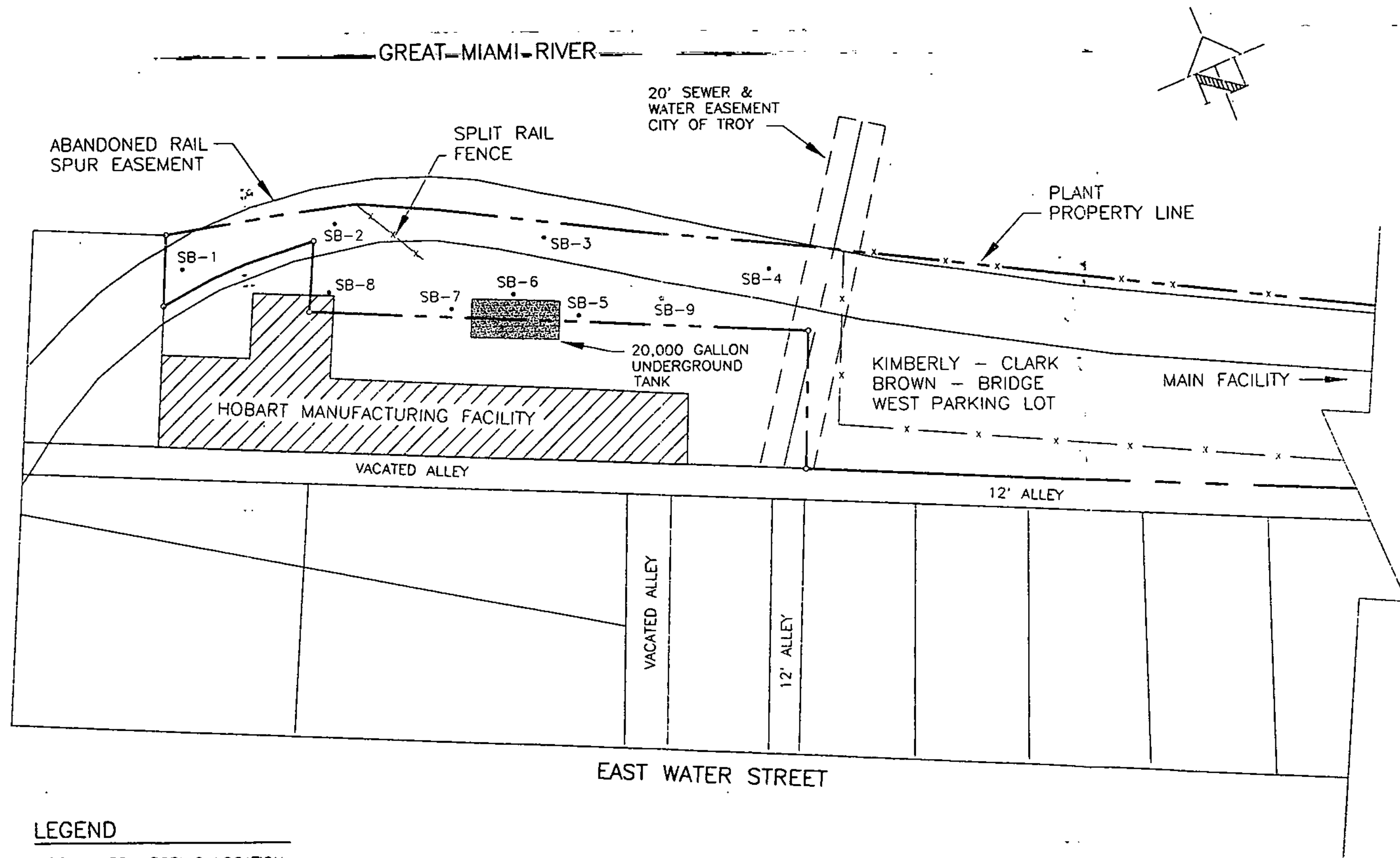
<u>Section</u>	<u>Page</u>
I. INTRODUCTION .....	I-1
II. SOILS INVESTIGATION .....	II-1
III. SUMMARY OF LABORATORY ANALYSES .....	III-1
IV. CONCLUSIONS .....	IV-1
APPENDIX	
A. LABORATORY REPORTS	

## **I. INTRODUCTION**

Kimberly-Clark Corporation has operated the Brown-Bridge facilities in Troy, Ohio since 1971. The facility manufactures pressure-, moisture-, and heat-sensitive adhesive stock for labels, stamps and related items. The Brown-Bridge operations consist of two separate plants located in Troy. The original facility (Plant 1) is located at 518 East Water Street, and is the location at which Brown-Bridge began operations in 1928. A second plant (Plant 2) is located at 30 Mary-Bill Drive, approximately 2 miles northwest of Plant 1 in an industrial park. Plant 2 began operating in 1978 and expanded in 1985.

During a record search of property deeds for Plant 1 on East Water St., it was discovered that an additional "sliver" property located on the west end of the west parking lot was also owned by Brown-Bridge and the Baltimore and Ohio Railroad (Figure 1). The railroad and "sliver" property, approximately 30 feet wide and 260 feet long, had previously been a rail spur which branched from the main Baltimore and Ohio rail line to service the Brown-Bridge facility and neighboring operation owned by Hobart.

The railroad and "sliver" property is bound to the north by the Miami Conservancy which maintains the levee along the Great Miami River. To the south, the land is bound by three residential lots and the Hobart Company (Hobart). Hobart manufactures steel panel filing and storage cabinets. As part of the Hobart operations, paint booths located in the



# LEGEND

• SB-1 SOIL BORING LOCATION

FIGURE 1

3326A003.DWG

SCALE	NO.	DATE	REVISION	DESCRIPTION
APPROX. 1"=40'				
DWN. BY KMK				
CHK'D. BY GEW				
APPR. BY GEW				



Applied  
Engineering &  
Science

Atlanta  
Georgia

SOIL BORING LOCATION MAP  
KIMBERLY-CLARK CORPORATION  
BROWN-BRIDGE PLANT 1, TROY OHIO

DATE  
JUNE, 1994  
DWG. NO.  
3326A  
SHEET NO.

back of the building are used to spray paint the steel cabinets. Ventilation ports from the paint booths are located on the back side of the building and direct exhaust fumes toward the river and the narrow strip owned by the Brown-Bridge operations. In addition, Hobart maintains a 20,000 gallon underground storage tank (UST) behind their facility which is reportedly used to store heating oil. The UST is centered lengthwise on the property line which divides the Hobart property and the narrow strip of land owned by Brown-Bridge.

Applied Engineering and Science (AES) was contracted by Kimberly-Clark to collect soil samples from the former rail spur and around the Hobart UST. The purpose of the sampling was to determine if the UST or past operations of the rail spur have impacted soil quality. This report describes the sampling and results.



## **II. SOILS INVESTIGATION**

---

Soil samples were collected May 24th and 25th, 1994, on the Brown-Bridge and railroad property to determine if past or current activities have impacted soil quality. A total of nine (9) soil samples were collected along an abandoned rail spur, and immediately adjacent to a 20,000 gallon UST which is centered on the Hobart and Brown-Bridge property line. Soil samples were collected utilizing stainless-steel manual augers in six (6) locations (SB-1, 2, 3, 4, 8, and 9), but due to buried construction rubble around the UST, a rubber tire backhoe was used to collect samples in three locations adjacent to the storage tank (SB-5, 6, and 7, Figure 1).

Stainless steel auger buckets used to collect soils for laboratory analyses were decontaminated prior to collecting samples, and between sample location using liquinox detergent and water to remove soil accumulated on the auger buckets. The auger buckets were then rinsed with isopropyl alcohol and allowed to air dry, then double rinsed with deionized water to prevent potential cross contamination by sampling equipment.

Soils collected for laboratory analyses were placed in clean glass sample containers provided by EcoSys Laboratory Services, Inc. (EcoSys), and appropriately labeled in the field for identification. Soils collected were placed on ice in a plastic cooler to preserve the integrity of the samples for laboratory analyses. Samples were shipped May 25, 1994,

via Federal Express priority overnight to EcoSys located in Atlanta, Georgia.

Four soil samples were collected along the old rail spur (SB-1, 2, 3, and 4). Samples were collected by advancing a stainless steel manual auger bucket to a depth of 2.5 to 3 feet below grade where a clay base was encountered. Samples were collected at the interface of the clay and black sandy material used as ballast in the rail bed.

Two additional locations were sampled utilizing the hand augers (SB-8 and 9). Soils were collected at the corner of the Hobart building (SB-8) which is apparently on the Brown-Bridge property. This corner of the Hobart building appeared to be a location where building rubble and trash have been dumped to fill a depression in the surface soils along the edge of the building foundation. Access to this location is unrestricted and local fishermen were observed parking behind the Hobart facility to fish at a spillway in the Great Miami River. As a result, trash and other debris are left on the ground in this area by people using this area to access the river for recreational purposes. Therefore, it may not be possible to accurately determine the origin of the trash, or what may have been discarded at this location in the past. An auger bucket was advanced to a depth of 2 feet below grade in the SB-8 location near the corner of the Hobart building where the trash and debris has accumulated.

Soil boring 9 (SB-9) was collected at a depth of 3 feet below grade at the edge of the tree

line approximately half the distance between the eastern end of the UST and the west parking lot of Brown-Bridge.

Several unsuccessful attempts were made to advance a manual auger in three locations adjacent to the UST. As previously mentioned, the UST has been placed in a location where a brick building was demolished in place. Samples collected adjacent to the UST (SB-5, 6, and 7) were collected utilizing a rubber tire backhoe to dig to depth of ten feet below grade. Ten feet below grade is approximately the depth of the base of the 20,000 gallon fuel oil tank.

The excavation of soils adjacent to the tank indicated the building which had stood at this location may have had a basement because brick and large chunks of concrete slab were encountered the entire depth of the excavation. Samples were collected by transferring soils which had not come in contact with the backhoe bucket into the sample containers provided by the EcoSys. The excavations were back-filled with the excavated material and restored to the original grade.

### **III. SUMMARY OF LABORATORY ANALYSES**

---

Laboratory analyses of soils collected at the Brown-Bridge plant in May of 1994 included total petroleum hydrocarbons (TPHs) using EPA method 8015, volatile organic compounds (VOCs) using EPA method 8260, and semi-volatile organic compounds (SVOCs) using EPA method 8270. Table 1 summarizes laboratory analytical results for soil samples collected immediately adjacent to the 20,000 gallon UST, along the center line of the abandoned rail spur, and two additional locations along the narrow strip of property located behind the Hobart facility. Analytical reports from EcoSys Laboratory Services, Inc. are presented in Appendix A.

For comparative analysis, the concentrations of constituents detected in the soils were compared to federal corrective action levels (CALs) proposed in the Federal Register on July, 27, 1990 by the U. S. Environmental Protection Agency (USEPA) under the Resource Conservation and Recovery Act (RCRA). In the column on the far right of Table 1, federal CALs are listed for comparison of constituents detected in soils analyses. Comparison of the concentration levels of the constituents detected are not intended to imply the applicability of any state or federal regulations to this site. Some of the constituents detected in the soils do not have CALs.

Laboratory analyses of soils collected confirmed the presence of VOCs and SVOCs in low

**TABLE 1**  
**KIMBERLY-CLARK CORPORATION**  
**BROWN-BRIDGE MAIN PLANT**  
**TROY, OHIO**  
**AES/May 24-25, 1994**

Soil Borings ID	SB1-3'	SB2-3'	SB3-2.3'	SB4-2.5'	SB5-10'	SB6-10'	SB7-10'	SB8-2'	SB9-3'	CAL
<b>VOC'S (EPA-8260)</b>										
Benzene	ND	ND	ND	11	ND	ND	ND	ND	ND	NRL
CIS-1,2-Dichloroethene	ND	ND	ND	26	ND	ND	ND	ND	ND	NRL
Methylene Chloride	16	14	ND	15	ND	ND	ND	ND	ND	90,000 <sup>1</sup>
Napthalene	ND	ND	ND	81	ND	ND	ND	ND	ND	NRL
Trichloroethene	ND	ND	640	12,000	ND	9.0	58	500	ND	60,000 <sup>1</sup>
1,2,3 Trichlorobenzene	8	6.3	ND	7	ND	ND	ND	ND	ND	NRL
1,2,4, Trichlorobenzene	6	ND	ND	5	ND	ND	ND	ND	ND	2,000,000 <sup>1</sup>
1,1,2, Trichloroethane	ND	ND	ND	160	ND	ND	ND	ND	ND	1,000,000 <sup>1</sup>
Tetrachloroethene	ND	ND	200	240	ND	6.0	24	470	ND	10,000 <sup>1</sup>
Toluene	8	ND	ND	20	ND	ND	ND	31	ND	20,000,000 <sup>1</sup>
Xylene	ND	ND	ND	13	ND	ND	ND	ND	ND	200,000,000 <sup>1</sup>

All concentrations reported in µg/kg (ppb)

ND - Not detected

NRL - No regulatory level exists

<sup>1</sup> - Proposed July 27, 1990, Federal Corrective Action Level

**TABLE 1 (CONTINUED)**  
**KIMBERLY-CLARK CORPORATION**  
**BROWN-BRIDGE MAIN PLANT**  
**TROY, OHIO**  
**AES/May 24-25, 1994**

Soil Borings ID	SB1-3'	SB2-3'	SB3-2.3'	SB4-2.5'	SB5-10'	SB6-10'	SB7-10'	SB8-2'	SB9-3'	CAL
<b>SVOC's (EPA-8270)</b>										
Anthracene	ND	ND	ND	2450	ND	ND	ND	ND	ND	NRL
Acenaphthylene	ND	ND	ND	1300	ND	ND	ND	ND	ND	NRL
Benzo (A) Anthracene	5300	ND	ND	16,100	ND	ND	ND	1200	ND	NRL
Benzo (G,H,I) Perylene	7000	ND	ND	8,500	ND	ND	ND	1370	ND	NRL
Benzo (A) Pyrene	6710	ND	ND	13,500	ND	ND	ND	1020	ND	NRL
Benzo (B) Fluoranthene	8030	ND	ND	16,500	ND	ND	ND	ND	ND	NRL
Benzo (K) Fluoranthene	4460	ND	ND	9,260	ND	ND	ND	1040	ND	NRL
Chrysene	6200	ND	ND	11,900	ND	ND	ND	1160	ND	NRL
Dibenzo (A,H) Anthracene	2340	ND	ND	5,450	ND	ND	ND	1130	ND	NRL
Fluoranthene	5100	ND	ND	16,200	ND	ND	ND	1690	ND	NRL
Ideno (1,2,3-CD) Pyrene	6740	ND	ND	11,800	ND	ND	ND	ND	ND	NRL
Phenanthrene	1050	ND	ND	6,530	ND	ND	ND	1670	ND	NRL
Pyrene	6950	ND	ND	23,200	ND	ND	ND	1830	ND	NRL

All concentrations reported in µg/kg (ppb)

ND - Not detected

NRL - No regulatory level exists

<sup>1</sup> - Proposed July 27, 1990, Federal Corrective Action Level



**TABLE 1 (CONTINUED)**  
**KIMBERLY-CLARK CORPORATION**  
**BROWN-BRIDGE MAIN PLANT**  
**TROY, OHIO**  
**AES/May 24-25, 1994**

Soil Borings ID	SB1-3'	SB2-3'	SB3-2.3'	SB4-2.5'	SB5-10'	SB6-10'	SB7-10'	SB8-2'	SB9-3'	CAL
<b>TPH (8015)</b>										
Gasoline	ND	ND	ND	ND	ND	ND	ND	ND	ND	NRL
Kerosene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NRL
Diesel	ND	ND	ND	ND	ND	ND	ND	ND	ND	NRL

All concentrations reported in µg/kg (ppb)

ND - Not detected

NRL - No regulatory level exists

<sup>1</sup> - Proposed July 27, 1990, Federal Corrective Action Level

concentrations in the shallow soils along the rail spur (SB-1, 2, 3 and 4). Soils collected from borings SB-2 and SB-3 were relatively clean with the exceptions of low concentrations of VOCs present. Soils collected from borings SB-1 and SB-4 contain a wide variety of VOCs and SVOCs present in the shallow soils, however, constituents detected are in relatively low concentrations in comparison to the proposed CALs.

Shallow soils collected from the corner of the Hobart facility (SB-8) contained a variety of VOCs and SVOCs in low concentrations. Soils collected from SB-9 had no detectable concentrations of VOCs, SVOCs or petroleum hydrocarbons.

Soils collected at a depth of 10 feet adjacent to the UST (SB-5, 6 and 7) were intended to detect potential releases from the storage tank. Laboratory analyses of soils collected did not indicate the presence of gasoline, diesel, or kerosene constituents. Laboratory analyses of soils collected from SB-5 did not detect VOCs or SVOCs at a depth of 10 feet below the surface. Soils collected from SB-6 and SB-7 indicated the presence of very low concentrations of trichloroethene and tetrachloroethene.

#### **IV. CONCLUSIONS**

The following conclusions are based on laboratory analyses of soil samples collected from the area surrounding the Hobart UST and along the former Baltimore & Ohio rail spur to Brown-Bridge Plant 1:

1. Based on visual inspection and analytical results from three soil samples, there is no indication the fuel oil UST on the Hobart/Kimberly-Clark property line has leaked.
2. Four soil samples collected along the former rail spur indicate contamination of soils with low levels of volatile and semivolatile hydrocarbons. The heavier (semivolatile) hydrocarbons are typical of rail operations and could originate from treated rail ties, locomotives leaking diesel fuel and/or lubricants, or coal which was observed by the sampling crew in the rail ballast.
3. One soil sample (SB-8) collected at the corner of the Hobart building also contained low concentrations of volatile and semivolatile hydrocarbons. The source of these compounds at this location was not readily apparent, but could be trash and debris in the area either from Hobart operations or use

of the area from people offsite.

---

4. Several soil samples, including some from borings near the UST, along the rail spur and at the corner of the Hobart building contained concentrations of VOCs which are not indicative of either fuel oil storage or rail operations. These VOCs (trichloroethene, tetrachloroethane, methylene chloride and others) are common industrial solvents.
  
5. The concentrations and distribution of VOCs found on the property are not indicative of a major release or spill. It is more likely that these low concentrations resulted from small releases over a period of time. Given the proximity of Hobart and because the Hobart property is upgradient and upslope of the Brown-Bridge property, it is probable that the VOC soil contamination originates from the long-term daily operations of Hobart.

**APPENDIX A**

**LABORATORY ANALYTICAL REPORTS**

**EcoSys**

Laboratory Services

**ANALYTICAL  
REPORT**

1412 Oakbrook Drive  
Suite 105  
Norcross, Georgia 30093

Phone 404.368.0636  
Fax 404.368.0806

Applied Engineering  
Dave Butler  
2261 Perimeter Park Drive  
Suit 1, Atlanta, GA 30341  
F: 454-1816

Client Code 20111539

Ledger Number 103049

P.O. Number

Date Received 05/26/94

Time Received 10:45

Date Reported 06/02/94

Sample ID AA07347

Date Analyzed 05/27/94

Date Sampled 05/24/94

Sample Description 3326B, SB3-2.3'

Time Sampled 15:15

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below MDL	ug/Kg
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL	ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY)METHANE	111-91-1	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL	ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below MDL	ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL	ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL	ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL	ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL	ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	Below MDL	ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL	ug/Kg



Sample ID AAD7347		Date Analyzed 05/27/94		Date Sampled 05/24/94	
Sample Description 3326B, SB3-2.3				Time Sampled 15:15	
Test Code	Method	Analyte	CAS No.	MDL	Result Unit
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below MDL ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below MDL ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below MDL ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below MDL ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below MDL ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below MDL ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below MDL ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below MDL ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below MDL ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below MDL ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below MDL ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below MDL ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below MDL ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below MDL ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below MDL ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	Below MDL ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	Below MDL ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below MDL ug/Kg
\$06018	8270	FLUORANTHENE	206-44-0	1000	Below MDL ug/Kg
\$06018	8270	BENZIDINE	92-87-5	7999	Below MDL ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	Below MDL ug/Kg
\$06018	8270	BUTYLBENZYLPHTHALATE	85-68-7	1000	Below MDL ug/Kg
\$06018	8270	3,3'-DICHLOROBENZIDINE	91-94-1	1000	Below MDL ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	Below MDL ug/Kg
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below MDL ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	Below MDL ug/Kg
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below MDL ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	Below MDL ug/Kg
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	Below MDL ug/Kg
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	Below MDL ug/Kg
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	Below MDL ug/Kg
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	Below MDL ug/Kg
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	Below MDL ug/Kg
\$08009	8015	*****TPH 8015 MOD (SOIL)*****		----	***** mg/Kg
\$08009	8015	GASOLINE		10	Below MDL mg/Kg
\$08009	8015	KEROSENE		10	Below MDL mg/Kg
\$08009	8015	DIESEL		10	Below MDL mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		----	***** ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below MDL ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below MDL ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below MDL ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below MDL ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below MDL ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below MDL ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below MDL ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	Below MDL ug/Kg
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below MDL ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below MDL ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below MDL ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below MDL ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below MDL ug/Kg

Sample ID AA07347

Date Analyzed 05/27/94

Date Sampled 05/24/94

Sample Description 3326B, SB3-2.3'

Time Sampled 15:15

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below MDL	ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL	ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	25.0	640	ug/Kg
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL	ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below MDL	ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL	ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL	ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL	ug/Kg
\$08025	8260	TOLUENE	108-88-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL	ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	5.0	200	ug/Kg
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	XYLENE (TOTAL)	1330-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	Below MDL	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	Below MDL	ug/Kg

Sample ID AA07348 Date Analyzed 06/01/94 Date Sampled 05/24/94  
 Sample Description 3326B, SB1-3.0' Time Sampled 10:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below MDL	ug/Kg
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL	ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY)METHANE	111-91-1	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL	ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below MDL	ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL	ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL	ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL	ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL	ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	Below MDL	ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL	ug/Kg
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below MDL	ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below MDL	ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below MDL	ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below MDL	ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below MDL	ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below MDL	ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below MDL	ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below MDL	ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below MDL	ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below MDL	ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	1050	ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below MDL	ug/Kg

Sample ID AA07348 Date Analyzed 06/01/94 Date Sampled 05/24/94  
 Sample Description 3326B, SB1-3.0' Time Sampled 10:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	FLUORANTHENE	206-44-0	1000	5100 ug/Kg	
\$06018	8270	BENZIDINE	92-87-5	7999	Below MDL	ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	6950 ug/Kg	
\$06018	8270	BUTYLBENZYLPHTHALATE	85-68-7	1000	Below MDL	ug/Kg
\$06018	8270	3,3'-DICHLOROBENZIDINE	91-94-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	5300 ug/Kg	
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below MDL	ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	6200 ug/Kg	
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	8030 ug/Kg	
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	4460 ug/Kg	
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	6710 ug/Kg	
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	6470 ug/Kg	
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	2340 ug/Kg	
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	7000 ug/Kg	
\$08009	8015	*****TPH 8015 MOD (SOIL)*****		----	*****	mg/Kg
\$08009	8015	GASOLINE		10	Below MDL	mg/Kg
\$08009	8015	KEROSENE		10	Below MDL	mg/Kg
\$08009	8015	DIESEL		10	Below MDL	mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		----	*****	ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below MDL	ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below MDL	ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below MDL	ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	16 ug/Kg	
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below MDL	ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below MDL	ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below MDL	ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL	ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL	ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below MDL	ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL	ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL	ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL	ug/Kg
\$08025	8260	TOLUENE	108-88-3	5.0	8.0 ug/Kg	
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL	ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL	ug/Kg

Sample ID AA07348 Date Analyzed 06/01/94 Date Sampled 05/24/94  
 Sample Description 3326B, SB1-3.0' Time Sampled 10:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	XYLENE (TOTAL)	1330-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	6.0	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	8.0	ug/Kg

Sample ID AA07349 Date Analyzed 06/01/94 Date Sampled 05/24/94  
 Sample Description 3326B, SB4-2.5' Time Sampled 15:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below MDL	ug/Kg

Sample ID		Date Analyzed		Date Sampled	
AA07349		06/01/94		05/24/94	
Sample Description		Time Sampled			
33268, SB4-2.5'		15:00			
Test Code	Method	Analyte	CAS No.	MDL	Result Unit
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY)METHANE	111-91-1	1000	Below MDL ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below MDL ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	1300 ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL ug/Kg
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below MDL ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below MDL ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below MDL ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below MDL ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below MDL ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below MDL ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below MDL ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below MDL ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below MDL ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below MDL ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below MDL ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below MDL ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below MDL ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below MDL ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below MDL ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	6530 ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	2450 ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below MDL ug/Kg
\$06018	8270	FLUORANTHENE	206-44-0	1000	16200 ug/Kg
\$06018	8270	BENZIDINE	92-87-5	7999	Below MDL ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	23200 ug/Kg
\$06018	8270	BUTYLBENZYLPHTHALATE	85-68-7	1000	Below MDL ug/Kg
\$06018	8270	3,3'-DICHLOROBENZIDINE	91-94-1	1000	Below MDL ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	16100 ug/Kg
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below MDL ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	11900 ug/Kg
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below MDL ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	16500 ug/Kg
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	9260 ug/Kg
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	13500 ug/Kg
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	11800 ug/Kg
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	5450 ug/Kg
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	8500 ug/Kg
\$08009	8015	*****TPH 8015 MOD (SOIL)*****		----	***** mg/Kg
\$08009	8015	GASOLINE		10	Below MDL mg/Kg
\$08009	8015	KEROSENE		10	Below MDL mg/Kg



Sample ID AA07349

Date Analyzed 06/01/94

Date Sampled 05/24/94

Sample Description 3326B, SB4-2.5'

Time Sampled 15:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08009	8015	DIESEL		10	Below MDL	mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		-----	*****	ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below MDL	ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below MDL	ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below MDL	ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	15	ug/Kg
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below MDL	ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below MDL	ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	26	ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below MDL	ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL	ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	11	ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	250.0	12000	ug/Kg
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL	ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below MDL	ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL	ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL	ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL	ug/Kg
\$08025	8260	TOLUENE	108-68-3	5.0	20	ug/Kg
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	160	ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL	ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	5.0	240	ug/Kg
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	XYLENE (TOTAL)	1330-20-7	5.0	13	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg

Sample ID AA07349 Date Analyzed 06/01/94 Date Sampled 05/24/94  
 Sample Description 3326B, SB4-2.5' Time Sampled 15:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	5.0	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0	81	ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	7.0	ug/Kg

Sample ID AA07350 Date Analyzed 05/27/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB2-3.0' Time Sampled 15:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below MDL	ug/Kg
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL	ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY) METHANE	111-91-1	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL	ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below MDL	ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL	ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL	ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL	ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL	ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	Below MDL	ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL	ug/Kg

Sample ID AA07350

Date Analyzed 05/27/94

Date Sampled 05/25/94

Sample Description 3326B, SB2-3.0'

Time Sampled 15:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below MDL	ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below MDL	ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below MDL	ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below MDL	ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below MDL	ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below MDL	ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below MDL	ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below MDL	ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below MDL	ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below MDL	ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	Below MDL	ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below MDL	ug/Kg
\$06018	8270	FLUORANTHENE	206-44-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZIDINE	92-87-5	7999	Below MDL	ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	Below MDL	ug/Kg
\$06018	8270	BUTYLBENZYLPHTHALATE	85-68-7	1000	Below MDL	ug/Kg
\$06018	8270	3,3'-DICHLOROBENZIDINE	91-94-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below MDL	ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	Below MDL	ug/Kg
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	Below MDL	ug/Kg
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	Below MDL	ug/Kg
\$08009	8015	*****TPH 8015 MOD (SOIL)*****		----	*****	mg/Kg
\$08009	8015	GASOLINE		10	Below MDL	mg/Kg
\$08009	8015	KEROSENE		10	Below MDL	mg/Kg
\$08009	8015	DIESEL		10	Below MDL	mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		----	*****	ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below MDL	ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below MDL	ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below MDL	ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	14	ug/Kg
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below MDL	ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below MDL	ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below MDL	ug/Kg

Sample ID AA07350 Date Analyzed 05/27/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB2-3.0' Time Sampled 15:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below MDL	ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL	ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL	ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below MDL	ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL	ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL	ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL	ug/Kg
\$08025	8260	TOLUENE	108-88-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL	ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	XYLENE (TOTAL)	1330-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	Below MDL	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	Below MDL	6.3 ug/Kg

Sample ID AA07351 Date Analyzed 05/27/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB5-10' Time Sampled 14:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
-----------	--------	---------	---------	-----	--------	------

Sample ID AA07351

Date Analyzed 05/27/94

Date Sampled 05/25/94

Sample Description 3326B, SB5-10

Time Sampled 14:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below MDL	ug/Kg
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL	ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY)METHANE	111-91-1	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL	ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below MDL	ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL	ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL	ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL	ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL	ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	Below MDL	ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL	ug/Kg
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below MDL	ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below MDL	ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below MDL	ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below MDL	ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below MDL	ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below MDL	ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below MDL	ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below MDL	ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below MDL	ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below MDL	ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	Below MDL	ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below MDL	ug/Kg

Sample ID AA07351

Date Analyzed 05/27/94

Date Sampled 05/25/94

Sample Description 3326B, SB5-10'

Time Sampled 14:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	FLUORANTHENE	206-44-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZIDINE	92-87-5	7999	Below MDL	ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	Below MDL	ug/Kg
\$06018	8270	BUTYLPHENYLPHTHALATE	85-68-7	1000	Below MDL	ug/Kg
\$06018	8270	3,3'-DICHLOROBENZIDINE	91-94-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below MDL	ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	Below MDL	ug/Kg
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	Below MDL	ug/Kg
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	Below MDL	ug/Kg
\$08009	8015	*****TPH 8015 MOD (SOIL)*****		----	*****	mg/Kg
\$08009	8015	GASOLINE		10	Below MDL	mg/Kg
\$08009	8015	KEROSENE		10	Below MDL	mg/Kg
\$08009	8015	DIESEL		10	Below MDL	mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		----	*****	ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below MDL	ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below MDL	ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below MDL	ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	Below MDL	ug/Kg
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below MDL	ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below MDL	ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below MDL	ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL	ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL	ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below MDL	ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL	ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL	ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL	ug/Kg
\$08025	8260	TOLUENE	108-88-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL	ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL	ug/Kg

Sample ID AA07351 Date Analyzed 05/27/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB5-10' Time Sampled 14:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	XYLENE (TOTAL)	1330-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	Below MDL	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	Below MDL	ug/Kg

Sample ID AA07352 Date Analyzed 05/31/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB6-10' Time Sampled 14:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below MDL	ug/Kg

Sample ID AA07352 Date Analyzed 05/31/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB6-10' Time Sampled 14:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL	ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY)METHANE	111-91-1	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL	ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below MDL	ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL	ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL	ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL	ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL	ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	Below MDL	ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL	ug/Kg
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below MDL	ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below MDL	ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below MDL	ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below MDL	ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below MDL	ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below MDL	ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below MDL	ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below MDL	ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below MDL	ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below MDL	ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	Below MDL	ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below MDL	ug/Kg
\$06018	8270	FLUORANTHENE	206-44-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZIDINE	92-87-5	7999	Below MDL	ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	Below MDL	ug/Kg
\$06018	8270	BUTYLBENZYLPHTHALATE	85-68-7	1000	Below MDL	ug/Kg
\$06018	8270	3,3'-DICHLOROBENZIDINE	91-94-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below MDL	ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	Below MDL	ug/Kg
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	Below MDL	ug/Kg
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(C,H,I)PERYLENE	191-24-2	1000	Below MDL	ug/Kg
\$08009	8015	*****TPH 8015 MOD (SOIL)*****		----	*****	mg/Kg
\$08009	8015	GASOLINE		10	Below MDL	mg/Kg
\$08009	8015	KEROSENE		10	Below MDL	mg/Kg



Sample ID AA07352

Date Analyzed 05/31/94

Date Sampled 05/25/94

Sample Description 3326B, SB6-10

Time Sampled 14:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08009	8015	DIESEL		10	Below MDL	mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		----	*****	ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below MDL	ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below MDL	ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below MDL	ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	Below MDL	ug/Kg
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below MDL	ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below MDL	ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below MDL	ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL	ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	5.0	9.0	ug/Kg
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL	ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below MDL	ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL	ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL	ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL	ug/Kg
\$08025	8260	TOLUENE	108-88-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL	ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	5.0	6.0	ug/Kg
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	XYLENE (TOTAL)	1330-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg

Sample ID AA07352 Date Analyzed 05/31/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB6-10' Time Sampled 14:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	Below MDL	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	Below MDL	ug/Kg

Sample ID AA07353 Date Analyzed 05/27/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB7-10' Time Sampled 14:40

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below MDL	ug/Kg
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL	ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY)METHANE	111-91-1	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL	ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below MDL	ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL	ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL	ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL	ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL	ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	Below MDL	ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL	ug/Kg

Sample ID AA07353 Date Analyzed 05/27/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB7-10' Time Sampled 14:40

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below	MDL ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below	MDL ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below	MDL ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below	MDL ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below	MDL ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below	MDL ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below	MDL ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below	MDL ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below	MDL ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below	MDL ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below	MDL ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below	MDL ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below	MDL ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below	MDL ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below	MDL ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	Below	MDL ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	Below	MDL ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below	MDL ug/Kg
\$06018	8270	FLUORANTHENE	206-44-0	1000	Below	MDL ug/Kg
\$06018	8270	BENZIDINE	92-87-5	7999	Below	MDL ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	Below	MDL ug/Kg
\$06018	8270	BUTYLBENZYLPHTHALATE	85-68-7	1000	Below	MDL ug/Kg
\$06018	8270	3,3'-DICHLOROBENZIDINE	91-94-1	1000	Below	MDL ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	Below	MDL ug/Kg
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below	MDL ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	Below	MDL ug/Kg
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below	MDL ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	Below	MDL ug/Kg
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	Below	MDL ug/Kg
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	Below	MDL ug/Kg
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	Below	MDL ug/Kg
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	Below	MDL ug/Kg
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	Below	MDL ug/Kg
\$08009	8015	*****TPH 8015 MOD (SOIL)*****		----	*****	mg/Kg
\$08009	8015	GASOLINE		10	Below	MDL mg/Kg
\$08009	8015	KEROSENE		10	Below	MDL mg/Kg
\$08009	8015	DIESEL		10	Below	MDL mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		----	*****	ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below	MDL ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below	MDL ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below	MDL ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below	MDL ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below	MDL ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below	MDL ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below	MDL ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	Below	MDL ug/Kg
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below	MDL ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below	MDL ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below	MDL ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below	MDL ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below	MDL ug/Kg
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	Below	MDL ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below	MDL ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below	MDL ug/Kg

Sample ID AA07353 Date Analyzed 05/27/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB7-10' Time Sampled 14:40

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below MDL	ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL	ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	5.0	58 ug/Kg	
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL	ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below MDL	ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL	ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL	ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL	ug/Kg
\$08025	8260	TOLUENE	108-88-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL	ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	5.0	24 ug/Kg	
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	XYLENE (TOTAL)	1330-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	Below MDL	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	Below MDL	ug/Kg

Sample ID AA07354 Date Analyzed 06/01/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB8-2' Time Sampled 16:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
-----------	--------	---------	---------	-----	--------	------

Sample ID AA07354 Date Analyzed 06/01/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB8-2' Time Sampled 16:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below MDL	ug/Kg
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL	ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY)METHANE	111-91-1	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL	ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below MDL	ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL	ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL	ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL	ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL	ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	Below MDL	ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL	ug/Kg
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below MDL	ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below MDL	ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below MDL	ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below MDL	ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below MDL	ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below MDL	ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below MDL	ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below MDL	ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below MDL	ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below MDL	ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	1670	ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below MDL	ug/Kg

Sample ID AA07354 Date Analyzed 06/01/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB8-2' Time Sampled 16:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	FLUORANTHENE	206-44-0	1000	1690 ug/Kg	
\$06018	8270	BENZIDINE	92-87-5	7999	Below MDL	ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	1830 ug/Kg	
\$06018	8270	BUTYLBENZYLPHTHALATE	85-68-7	1000	Below MDL	ug/Kg
\$06018	8270	3,3'-DICHLOROBENZIDINE	91-94-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	1200 ug/Kg	
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below MDL	ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	1160 ug/Kg	
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	1040 ug/Kg	
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	1020 ug/Kg	
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	Below MDL	ug/Kg
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	1130 ug/Kg	
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	1370 ug/Kg	
\$08009	8015	*****TPH 8015 MOD (SOIL)*****		---	*****	mg/Kg
\$08009	8015	GASOLINE		10	Below MDL	mg/Kg
\$08009	8015	KEROSENE		10	Below MDL	mg/Kg
\$08009	8015	DIESEL		10	Below MDL	mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		----	*****	ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below MDL	ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below MDL	ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below MDL	ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	Below MDL	ug/Kg
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below MDL	ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below MDL	ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below MDL	ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL	ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	12.5	500 ug/Kg	
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL	ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below MDL	ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL	ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL	ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL	ug/Kg
\$08025	8260	TOLUENE	108-88-3	5.0	31 ug/Kg	
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL	ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	12.5	470 ug/Kg	
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL	ug/Kg

Sample ID AA07354 Date Analyzed 06/01/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB8-2' Time Sampled 16:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	KYLENE (TOTAL)	1330-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	Below MDL	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	Below MDL	ug/Kg

Sample ID AA07355 Date Analyzed 05/31/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB9-3' Time Sampled 16:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below MDL	ug/Kg

Sample ID AA07355 Date Analyzed 05/31/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB9-3 Time Sampled 16:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL	ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY)METHANE	111-91-1	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL	ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below MDL	ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL	ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL	ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL	ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL	ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	Below MDL	ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL	ug/Kg
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below MDL	ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below MDL	ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below MDL	ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below MDL	ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below MDL	ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below MDL	ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below MDL	ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below MDL	ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below MDL	ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below MDL	ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	Below MDL	ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below MDL	ug/Kg
\$06018	8270	FLUORANTHENE	206-44-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZIDINE	92-87-5	7999	Below MDL	ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	Below MDL	ug/Kg
\$06018	8270	BUTYLBENZYLPHTHALATE	85-68-7	1000	Below MDL	ug/Kg
\$06018	8270	3,3'-DICHLOROBENZIDINE	91-94-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below MDL	ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	Below MDL	ug/Kg
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	Below MDL	ug/Kg
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	Below MDL	ug/Kg
\$08009	8015	*****TPE 8015 MOD (SOIL)*****		----	*****	mg/Kg
\$08009	8015	GASOLINE		10	Below MDL	mg/Kg
\$08009	8015	KEROSENE		10	Below MDL	mg/Kg



Sample ID AA07355 Date Analyzed 05/31/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB9-3' Time Sampled 16:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08009	8015	DIESEL		10	Below MDL	mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		-----	*****	ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below MDL	ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below MDL	ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below MDL	ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	Below MDL	ug/Kg
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below MDL	ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below MDL	ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below MDL	ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL	ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL	ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below MDL	ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL	ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL	ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL	ug/Kg
\$08025	8260	TOLUENE	108-88-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL	ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	KYLENE (TOTAL)	1330-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg

Sample ID AA07355

Date Analyzed 05/31/94

Date Sampled 05/25/94

Sample Description 3326B, SB9-3

Time Sampled 16:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	Below MDL	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	Below MDL	ug/Kg

Clinically Proven...

Environmentally Sound!

  
 Certifying Scientist

1412 Oakbrook Drive  
Suite 105  
Norcross, Georgia 30093

Phone 404.368.0636  
Fax 404.368.0806

Applied Engineering  
Dave Butler  
2261 Perimeter Park Drive  
Suit 1, Atlanta, GA 30341  
F: 454-1816

Client Code 20111539

Ledger Number 103049

P.O. Number

Date Received 05/26/94

Time Received 10:45

Date Reported 06/02/94

Sample ID AA07347

Date Analyzed 05/27/94

Date Sampled 05/24/94

Sample Description 3326B, SB3-2.3'

Time Sampled 15:15

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below MDL	ug/Kg
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL	ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY) METHANE	111-91-1	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL	ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below MDL	ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL	ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL	ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL	ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL	ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	Below MDL	ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL	ug/Kg

FAXED

JUN 03 1994

Sample ID AA07347

Date Analyzed 05/27/94

Date Sampled 05/24/94

Sample Description 3326B, SB3-2.3'

Time Sampled 15:15

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below MDL	ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below MDL	ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below MDL	ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below MDL	ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below MDL	ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below MDL	ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below MDL	ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below MDL	ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below MDL	ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below MDL	ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	Below MDL	ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below MDL	ug/Kg
\$06018	8270	FLUORANTHENE	206-44-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZIDINE	92-87-5	7999	Below MDL	ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	Below MDL	ug/Kg
\$06018	8270	BUTYLBENZYLPHTHALATE	85-68-7	1000	Below MDL	ug/Kg
\$06018	8270	3,3'-DICHLOROBENZIDINE	91-94-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below MDL	ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	Below MDL	ug/Kg
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	Below MDL	ug/Kg
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	Below MDL	ug/Kg
\$08009	8015	*****TPH 8015 MOD (SOIL)*****		----	*****	mg/Kg
\$08009	8015	GASOLINE		10	Below MDL	mg/Kg
\$08009	8015	KEROSENE		10	Below MDL	mg/Kg
\$08009	8015	DIESEL		10	Below MDL	mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		----	*****	ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below MDL	ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below MDL	ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below MDL	ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	Below MDL	ug/Kg
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below MDL	ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below MDL	ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below MDL	ug/Kg

FAXED

JUN 03 1994

# Pages .....

Sample ID AA07347

Date Analyzed 05/27/94

Date Sampled 05/24/94

Sample Description 3326B, SB3-2.3'

Time Sampled 15:15

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below MDL	ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL	ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	25.0	640	ug/Kg
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL	ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below MDL	ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL	ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL	ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL	ug/Kg
\$08025	8260	TOLUENE	108-88-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL	ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	5.0	200	ug/Kg
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	XYLENE (TOTAL)	1330-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	Below MDL	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	Below MDL	ug/Kg

FAXED

JUN 03 1994

# Pages .....

Sample ID AA07348

Date Analyzed 06/01/94

Date Sampled 05/24/94

Sample Description 3326B, SB1-3.0'

Time Sampled 10:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		-----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below MDL	ug/Kg
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL	ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY) METHANE	111-91-1	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL	ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below MDL	ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL	ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL	ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL	ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL	ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	Below MDL	ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL	ug/Kg
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below MDL	ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below MDL	ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below MDL	ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below MDL	ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below MDL	ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below MDL	ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below MDL	ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below MDL	ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below MDL	ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below MDL	ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	1050	ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below MDL	ug/Kg

# Pages  
JUN 03 1994  
EX-111

Sample ID AA07348

Date Analyzed 06/01/94

Date Sampled 05/24/94

Sample Description 3326B, SB1-3.0'

Time Sampled 10:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	FLUORANTHENE	206-44-0	1000	-5100 ug/Kg	
\$06018	8270	BENZIDINE	92-87-5	7999	Below MDL ug/Kg	
\$06018	8270	PYRENE	129-00-0	1000	6950 ug/Kg	
\$06018	8270	BUTYLBENZYLPHthalate	85-68-7	1000	Below MDL ug/Kg	
\$06018	8270	3,3'-DICHlorobenzidine	91-94-1	1000	Below MDL ug/Kg	
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	5300 ug/Kg	
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below MDL ug/Kg	
\$06018	8270	CHRYSENE	218-01-9	1000	6200 ug/Kg	
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below MDL ug/Kg	
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	8030 ug/Kg	
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	4460 ug/Kg	
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	6710 ug/Kg	
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	6470 ug/Kg	
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	2340 ug/Kg	
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	7000 ug/Kg	
\$08009	8015	*****TPH 8015 MOD (SOIL)*****		----	***** mg/Kg	
\$08009	8015	GASOLINE		10	Below MDL mg/Kg	
\$08009	8015	KEROSENE		10	Below MDL mg/Kg	
\$08009	8015	DIESEL		10	Below MDL mg/Kg	
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		----	***** ug/Kg	
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below MDL ug/Kg	
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below MDL ug/Kg	
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below MDL ug/Kg	
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below MDL ug/Kg	
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below MDL ug/Kg	
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below MDL ug/Kg	
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below MDL ug/Kg	
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	16 ug/Kg	
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below MDL ug/Kg	
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below MDL ug/Kg	
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below MDL ug/Kg	
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below MDL ug/Kg	
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below MDL ug/Kg	
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	Below MDL ug/Kg	
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below MDL ug/Kg	
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below MDL ug/Kg	
\$08025	8260	1,1,1-TRICHLOROETHANE	75-11-5	5.0	Below MDL ug/Kg	
\$08025	8260	1,1-DICHLOROPROPENE	593-58-6	5.0	Below MDL ug/Kg	
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below MDL ug/Kg	
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL ug/Kg	
\$08025	8260	BENZENE	71-43-2	5.0	Below MDL ug/Kg	
\$08025	8260	TRICHLOROETHENE	79-01-6	5.0	Below MDL ug/Kg	
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL ug/Kg	
\$08025	8260	BROMODICHLOROMETHANE	55-27-4	5.0	Below MDL ug/Kg	
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL ug/Kg	
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL ug/Kg	
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL ug/Kg	
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL ug/Kg	
\$08025	8260	TOLUENE	108-88-3	5.0	8.0 ug/Kg	
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL ug/Kg	
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	Below MDL ug/Kg	
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL ug/Kg	
\$08025	8260	TETRACHLOROETHENE	127-18-4	5.0	Below MDL ug/Kg	
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL ug/Kg	

# Pages

JUN 03 1994

EX-100

Sample ID	AA07348	Date Analyzed	06/01/94	Date Sampled	05/24/94
Sample Description	3326B, SB1-3.0'			Time Sampled	10:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
S08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
S08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
S08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
S08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
S08025	8260	XYLENE (TOTAL)	1330-20-7	5.0	Below MDL	ug/Kg
S08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
S08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
S08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
S08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
S08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
S08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
S08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
S08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
S08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
S08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
S08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
S08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
S08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg
S08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
S08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
S08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
S08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
S08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
S08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
S08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	6.0	ug/Kg
S08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
S08025	8260	NAPHTHALENE	91-20-3	5.0	Below MDL	ug/Kg
S08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	8.0	ug/Kg

Sample ID	AA07349	Date Analyzed	06/01/94	Date Sampled	05/24/94
Sample Description	3326B, SB4-2.5'			Time Sampled	15:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below MDL	ug/Kg

**FAXED**

JUN 03 1994

# Pages .....



Sample ID AA07349

Date Analyzed 06/01/94

Date Sampled 05/24/94

Sample Description 3326B, SB4-2.5'

Time Sampled 15:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL	ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY)METHANE	111-91-1	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL	ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below MDL	ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL	ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL	ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL	ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL	ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	1300	ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL	ug/Kg
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below MDL	ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below MDL	ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below MDL	ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below MDL	ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below MDL	ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below MDL	ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below MDL	ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below MDL	ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below MDL	ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below MDL	ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	6530	ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	2450	ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below MDL	ug/Kg
\$06018	8270	FLUORANTHENE	206-44-0	1000	16200	ug/Kg
\$06018	8270	BENZIDINE	92-87-5	7999	Below MDL	ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	23200	ug/Kg
\$06018	8270	BUTYLBENZYLPHTHALATE	85-68-7	1000	Below MDL	ug/Kg
\$06018	8270	3,3'-DICHLOROBENZIDINE	91-94-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	16100	ug/Kg
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below MDL	ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	11900	ug/Kg
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	16500	ug/Kg
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	9260	ug/Kg
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	13500	ug/Kg
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	11800	ug/Kg
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	5450	ug/Kg
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	8500	ug/Kg
\$08009	8015	*****TPH 8015 MOD (SOIL)*****		----	*****	mg/Kg
\$08009	8015	GASOLINE		10	Below MDL	mg/Kg
\$08009	8015	KEROSENE		10	Below MDL	mg/Kg

FAXED

JUN 03 1994

# Pages .....

Sample ID AA07349

Date Analyzed 06/01/94

Date Sampled 05/24/94

Sample Description 3326B, SB4-2.5'

Time Sampled 15:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08009	8015	DIESEL		10	Below MDL	mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		----	*****	ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below MDL	ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below MDL	ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below MDL	ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	15	ug/Kg
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below MDL	ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below MDL	ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	26	ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below MDL	ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL	ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	11	ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	250.0	12000	ug/Kg
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL	ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below MDL	ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL	ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL	ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL	ug/Kg
\$08025	8260	TOLUENE	108-88-3	5.0	20	ug/Kg
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	160	ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL	ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	5.0	240	ug/Kg
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	XYLENE (TOTAL)	1330-20-7	5.0	13	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg

EXXON  
JUN 03 1994

Sample ID	AA07349	Date Analyzed	06/01/94	Date Sampled	05/24/94
Sample Description	3326B, SB4-2.5'			Time Sampled	15:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below	MDL ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below	MDL ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below	MDL ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below	MDL ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below	MDL ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below	MDL ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	5.0	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below	MDL ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0		81 ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0		7.0 ug/Kg

Sample ID	AA07350	Date Analyzed	05/27/94	Date Sampled	05/25/94
Sample Description	3326B, SB2-3.0'			Time Sampled	15:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below	MDL ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below	MDL ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below	MDL ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below	MDL ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below	MDL ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below	MDL ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below	MDL ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below	MDL ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below	MDL ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below	MDL ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below	MDL ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below	MDL ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	62-64-7	1000	Below	MDL ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below	MDL ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below	MDL ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below	MDL ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below	MDL ug/Kg
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below	MDL ug/Kg
\$06018	8270	BIS(2-CHLOROETHOXY)METHANE	111-91-1	1000	Below	MDL ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below	MDL ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below	MDL ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below	MDL ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below	MDL ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below	MDL ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below	MDL ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below	MDL ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below	MDL ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below	MDL ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below	MDL ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below	MDL ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below	MDL ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below	MDL ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below	MDL ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	Below	MDL ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below	MDL ug/Kg

Sample ID AA07350

Date Analyzed 05/27/94

Date Sampled 05/25/94

Sample Description 3326B, SB2-3.0'

Time Sampled 15:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below	MDL ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below	MDL ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below	MDL ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below	MDL ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below	MDL ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below	MDL ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below	MDL ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below	MDL ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below	MDL ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below	MDL ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below	MDL ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below	MDL ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below	MDL ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below	MDL ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below	MDL ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	Below	MDL ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	Below	MDL ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below	MDL ug/Kg
\$06018	8270	FLUORANTHENE	106-44-0	1000	Below	MDL ug/Kg
\$06018	8270	BENZIDINE	92-87-5	7999	Below	MDL ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	Below	MDL ug/Kg
\$06018	8270	BUTYLBENZYLPHTHALATE	85-68-7	1000	Below	MDL ug/Kg
\$06018	8270	3,3'-DICHLOROBENZIDINE	91-94-1	1000	Below	MDL ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	Below	MDL ug/Kg
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below	MDL ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	Below	MDL ug/Kg
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below	MDL ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	Below	MDL ug/Kg
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	Below	MDL ug/Kg
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	Below	MDL ug/Kg
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	Below	MDL ug/Kg
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	Below	MDL ug/Kg
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	Below	MDL ug/Kg
\$08009	8015	*****TPH 8015 MOD (SOIL)*****		----	*****	mg/Kg
\$08009	8015	GASOLINE		10	Below	MDL mg/Kg
\$08009	8015	KEROSENE		10	Below	MDL mg/Kg
\$08009	8015	DIESEL		10	Below	MDL mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		----	*****	ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below	MDL ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below	MDL ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below	MDL ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below	MDL ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below	MDL ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below	MDL ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below	MDL ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0		14 ug/Kg
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below	MDL ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below	MDL ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below	MDL ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below	MDL ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below	MDL ug/Kg
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	Below	MDL ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below	MDL ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below	MDL ug/Kg

Sample ID	AA07350	Date Analyzed	05/27/94	Date Sampled	05/25/94
Sample Description	3326B, SB2-3.0'			Time Sampled	15:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below MDL	ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL	ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL	ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below MDL	ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL	ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL	ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL	ug/Kg
\$08025	8260	TOLUENE	108-88-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL	ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	XYLENE (TOTAL)	1330-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	Below MDL	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	6.3 ug/Kg	

Sample ID	AA07351	Date Analyzed	05/27/94	Date Sampled	05/25/94
Sample Description	3326B, SB5-10'			Time Sampled	14:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
-----------	--------	---------	---------	-----	--------	------

**FAXED**

JUN 03 1994

# Pages .....

Sample ID AA07351

Date Analyzed 05/27/94

Date Sampled 05/25/94

Sample Description 3326B, SB5-10'

Time Sampled 14:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below MDL	ug/Kg
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL	ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY) METHANE	111-91-1	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL	ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below MDL	ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL	ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL	ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL	ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL	ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	Below MDL	ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL	ug/Kg
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below MDL	ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below MDL	ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below MDL	ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below MDL	ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below MDL	ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below MDL	ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below MDL	ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below MDL	ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below MDL	ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below MDL	ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	Below MDL	ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below MDL	ug/Kg

15X12D  
JUN 03 1994  
#Pages

Sample ID AA07351

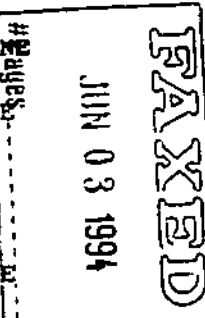
Date Analyzed 05/27/94

Date Sampled 05/25/94

Sample Description 3326B, SB5-10'

Time Sampled 14:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	FLUORANTHENE	206-44-0	1000	Below	MDL ug/Kg
\$06018	8270	BENZIDINE	92-87-5	7999	Below	MDL ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	Below	MDL ug/Kg
\$06018	8270	BUTYLBENZYLPHthalate	85-68-7	1000	Below	MDL ug/Kg
\$06018	8270	3,3'-DICHlorobenzidine	91-94-1	1000	Below	MDL ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	Below	MDL ug/Kg
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below	MDL ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	Below	MDL ug/Kg
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below	MDL ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	Below	MDL ug/Kg
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	Below	MDL ug/Kg
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	Below	MDL ug/Kg
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	Below	MDL ug/Kg
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	Below	MDL ug/Kg
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	Below	MDL ug/Kg
\$08009	8015	*****TPH 8015 MOD (SOIL)*****		----	*****	mg/Kg
\$08009	8015	GASOLINE		10	Below	MDL mg/Kg
\$08009	8015	KEROSENE		10	Below	MDL mg/Kg
\$08009	8015	DIESEL		10	Below	MDL mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		----	*****	ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below	MDL ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below	MDL ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below	MDL ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below	MDL ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below	MDL ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below	MDL ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below	MDL ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	Below	MDL ug/Kg
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below	MDL ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below	MDL ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below	MDL ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below	MDL ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below	MDL ug/Kg
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	Below	MDL ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below	MDL ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below	MDL ug/Kg
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below	MDL ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below	MDL ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below	MDL ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below	MDL ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	Below	MDL ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	5.0	Below	MDL ug/Kg
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below	MDL ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below	MDL ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below	MDL ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below	MDL ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below	MDL ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below	MDL ug/Kg
\$08025	8260	TOLUENE	108-88-3	5.0	Below	MDL ug/Kg
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below	MDL ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	Below	MDL ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below	MDL ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	5.0	Below	MDL ug/Kg
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below	MDL ug/Kg



Sample ID	AA07351	Date Analyzed	05/27/94	Date Sampled	05/25/94
Sample Description	3326B, SB5-10'			Time Sampled	14:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	XYLENE (TOTAL)	1330-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	Below MDL	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	Below MDL	ug/Kg

Sample ID	AA07352	Date Analyzed	05/31/94	Date Sampled	05/25/94
Sample Description	3326B, SB6-10'			Time Sampled	14:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below MDL	ug/Kg

**FAXED**

JUN 03 1994

#Pages



Sample ID AA07352

Date Analyzed 05/31/94

Date Sampled 05/25/94

Sample Description 3326B, SB6-10'

Time Sampled 14:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL	ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY)METHANE	111-91-1	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL	ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below MDL	ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL	ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL	ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL	ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL	ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	Below MDL	ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL	ug/Kg
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below MDL	ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below MDL	ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below MDL	ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below MDL	ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below MDL	ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below MDL	ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below MDL	ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below MDL	ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below MDL	ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below MDL	ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	Below MDL	ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below MDL	ug/Kg
\$06018	8270	FLUORANTHENE	206-44-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZIDINE	92-87-5	7999	Below MDL	ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	Below MDL	ug/Kg
\$06018	8270	BUTYLBENZYLPHTHALATE	85-68-7	1000	Below MDL	ug/Kg
\$06018	8270	3,3'-DICHLOROBENZIDINE	91-94-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below MDL	ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	Below MDL	ug/Kg
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	Below MDL	ug/Kg
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	Below MDL	ug/Kg
\$08009	8015	*****TPH 8015 MOD (SOIL)*****		----	*****	mg/Kg
\$08009	8015	GASOLINE		10	Below MDL	mg/Kg
\$08009	8015	KEROSENE		10	Below MDL	mg/Kg

**FAKED**

JUN 03 1994

# Pages .....

Sample ID AA07352

Date Analyzed 05/31/94

Date Sampled 05/25/94

Sample Description 3326B, SB6-10'

Time Sampled 14:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08009	8015	DIESEL		10	Below MDL	mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		----	*****	ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below MDL	ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below MDL	ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below MDL	ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	Below MDL	ug/Kg
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below MDL	ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below MDL	ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below MDL	ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL	ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	5.0	9.0	ug/Kg
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL	ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below MDL	ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL	ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL	ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL	ug/Kg
\$08025	8260	TOLUENE	108-88-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL	ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	5.0	6.0	ug/Kg
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	XYLENE (TOTAL)	1330-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg

EX-110  
JUN 03 1994  
# Pages

Sample ID	AA07352	Date Analyzed	05/31/94	Date Sampled	05/25/94
Sample Description	3326B, SB6-10'			Time Sampled	14:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	Below MDL	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	Below MDL	ug/Kg

Sample ID	AA07353	Date Analyzed	05/27/94	Date Sampled	05/25/94
Sample Description	3326B, SB7-10'			Time Sampled	14:40

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-1	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL	ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY) METHANE	111-91-1	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL	ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	1000	Below MDL	ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL	ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL	ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL	ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL	ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	Below MDL	ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL	ug/Kg

JUN 03 1994  
 EX-125

Sample ID AA07353

Date Analyzed 05/27/94

Date Sampled 05/25/94

Sample Description 3326B, SB7-10'

Time Sampled 14:40

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below MDL	ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below MDL	ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below MDL	ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below MDL	ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below MDL	ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below MDL	ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below MDL	ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below MDL	ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBENZENE	8-74-1	1000	Below MDL	ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below MDL	ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	Below MDL	ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below MDL	ug/Kg
\$06018	8270	FLUORANTHENE	206-44-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZIDINE	82-87-5	7999	Below MDL	ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	Below MDL	ug/Kg
\$06018	8270	BUTYLBENZYLPHTHALATE	85-68-7	1000	Below MDL	ug/Kg
\$06018	8270	3,3'-DICHLOROBENZIDINE	91-94-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below MDL	ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	Below MDL	ug/Kg
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	Below MDL	ug/Kg
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	Below MDL	ug/Kg
\$08009	8015	*****TPH 8015 MOD (SOIL)*****		----	*****	mg/Kg
\$08009	8015	GASOLINE		10	Below MDL	mg/Kg
\$08009	8015	KEROSENE		10	Below MDL	mg/Kg
\$08009	8015	DIESEL		10	Below MDL	mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		----	*****	ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below MDL	ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below MDL	ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below MDL	ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	Below MDL	ug/Kg
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below MDL	ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below MDL	ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below MDL	ug/Kg

Sample ID AA07353 Date Analyzed 05/27/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB7-10' Time Sampled 14:40

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below MDL	ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL	ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	5.0	58 ug/Kg	
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL	ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below MDL	ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL	ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL	ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL	ug/Kg
\$08025	8260	TOLUENE	108-88-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL	ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	5.0	24 ug/Kg	
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	XYLENE (TOTAL)	1330-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	Below MDL	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	Below MDL	ug/Kg

Sample ID AA07354 Date Analyzed 06/01/94 Date Sampled 05/25/94  
 Sample Description 3326B, SB8-2' Time Sampled 16:00

Test Code Method Analyte CAS No. MDL Result Unit

**FAXED**

JUN 03 1994

#Pages .....

Sample ID AA07354

Date Analyzed 06/01/94

Date Sampled 05/25/94

Sample Description 3326B, SB8-2'

Time Sampled 16:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****			*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below MDL	ug/Kg
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL	ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY)METHANE	111-91-1	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL	ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below MDL	ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL	ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL	ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL	ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL	ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	Below MDL	ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL	ug/Kg
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below MDL	ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below MDL	ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below MDL	ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below MDL	ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below MDL	ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below MDL	ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below MDL	ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below MDL	ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below MDL	ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below MDL	ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	1670	ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below MDL	ug/Kg

#Pages

JUN 03 1994

FAXED

Sample ID	AA07354	Date Analyzed	06/01/94	Date Sampled	05/25/94
Sample Description	3326B, SB8-2'			Time Sampled	16:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	FLUORANTHENE	206-44-0	1000	1690	ug/Kg
\$06018	8270	BENZIDINE	92-87-5	7999	Below MDL	ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	1830	ug/Kg
\$06018	8270	BUTYLBENZYLPHthalate	85-68-7	1000	Below MDL	ug/Kg
\$06018	8270	3,3'-DICHlorobenzidine	91-94-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	1200	ug/Kg
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below MDL	ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	1160	ug/Kg
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	1040	ug/Kg
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	1020	ug/Kg
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	Below MDL	ug/Kg
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	1130	ug/Kg
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	1370	ug/Kg
\$08009	8015	*****TPH 8015 MOD (SOIL)*****		----	*****	mg/Kg
\$08009	8015	GASOLINE		10	Below MDL	mg/Kg
\$08009	8015	KEROSENE		10	Below MDL	mg/Kg
\$08009	8015	DIESEL		10	Below MDL	mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		----	*****	ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below MDL	ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below MDL	ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below MDL	ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	Below MDL	ug/Kg
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below MDL	ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below MDL	ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below MDL	ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	236-23-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL	ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	12.5	500	ug/Kg
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL	ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below MDL	ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL	ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL	ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL	ug/Kg
\$08025	8260	TOLUENE	108-88-3	5.0	31	ug/Kg
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL	ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	12.5	470	ug/Kg
\$00025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL	ug/Kg

# Pages  
JUN 03 1994  
EX-100

Sample ID	AA07354	Date Analyzed	06/01/94	Date Sampled	05/25/94
Sample Description	3326B, SB8-2'			Time Sampled	16:00

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	XYLENE (TOTAL)	1330-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	35-98-8	5.0	Below MDL	ug/Kg
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	Below MDL	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	Below MDL	ug/Kg

EX-111  
JUN 03 1994  
#Pages

Sample ID	AA07355	Date Analyzed	05/31/94	Date Sampled	05/25/94
Sample Description	3326B, SB9-3'			Time Sampled	16:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	*****SEMI VOLATILES (SOIL)*****		----	*****	ug/Kg
\$06018	8270	N-NITROSODIMETHYLAMINE	62-75-9	1000	Below MDL	ug/Kg
\$06018	8270	ANILINE	62-53-3	1000	Below MDL	ug/Kg
\$06018	8270	PHENOL	108-95-2	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROETHYL) ETHER	111-44-1	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLOROPHENOL	95-57-8	1000	Below MDL	ug/Kg
\$06018	8270	1,3-DICHLOROBENZENE	541-73-1	1000	Below MDL	ug/Kg
\$06018	8270	1,4-DICHLOROBENZENE	106-46-7	1000	Below MDL	ug/Kg
\$06018	8270	BENZYL ALCOHOL	100-51-6	1000	Below MDL	ug/Kg
\$06018	8270	1,2-DICHLOROBENZENE	95-50-1	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-CHLOROISOPROPYL) ETHER	108-60-1	1000	Below MDL	ug/Kg
\$06018	8270	2-METHYLPHENOL	95-48-7	1000	Below MDL	ug/Kg
\$06018	8270	4-METHYLPHENOL	106-44-5	1000	Below MDL	ug/Kg
\$06018	8270	N-NITROSO-DI-N-PROPYLAMINE	621-64-7	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROETHANE	67-72-1	1000	Below MDL	ug/Kg
\$06018	8270	NITROBENZENE	98-95-3	1000	Below MDL	ug/Kg
\$06018	8270	ISOPHORONE	78-59-1	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROPHENOL	88-75-5	2000	Below MDL	ug/Kg



Sample ID AA07355

Date Analyzed 05/31/94

Date Sampled 05/25/94

Sample Description 3326B, SB9-3'

Time Sampled 16:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$06018	8270	2,4-DIMETHYLPHENOL	105-67-9	1000	Below MDL	ug/Kg
\$06018	8270	BIS(-2-CHLOROETHOXY)METHANE	111-91-1	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DICHLOROPHENOL	120-83-2	1000	Below MDL	ug/Kg
\$06018	8270	1,2,4-TRICHLOROBENZENE	120-82-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZOIC ACID	65-85-0	5000	Below MDL	ug/Kg
\$06018	8270	NAPHTHALENE	91-20-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROANILINE	106-47-8	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBUTADIENE	87-68-3	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLORO-3-METHYLPHENOL	59-50-7	2000	Below MDL	ug/Kg
\$06018	8270	2-METHYLNAPHTHALENE	91-57-6	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROCYCLOPENTADIENE	77-47-4	1000	Below MDL	ug/Kg
\$06018	8270	2,4,6-TRICHLOROPHENOL	88-06-2	1000	Below MDL	ug/Kg
\$06018	8270	2,4,5-TRICHLOROPHENOL	95-95-4	1000	Below MDL	ug/Kg
\$06018	8270	2-CHLORONAPHTHALENE	91-58-7	1000	Below MDL	ug/Kg
\$06018	8270	2-NITROANILINE	88-74-4	1000	Below MDL	ug/Kg
\$06018	8270	DIMETHYL PHTHALATE	131-11-3	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHYLENE	208-96-8	1000	Below MDL	ug/Kg
\$06018	8270	2,6-DINITROTOLUENE	606-20-2	1000	Below MDL	ug/Kg
\$06018	8270	3-NITROANILINE	99-09-2	1000	Below MDL	ug/Kg
\$06018	8270	ACENAPHTHENE	83-32-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROPHENOL	51-28-5	5000	Below MDL	ug/Kg
\$06018	8270	4-NITROPHENOL	100-02-7	5000	Below MDL	ug/Kg
\$06018	8270	DIBENZOFURAN	132-64-9	1000	Below MDL	ug/Kg
\$06018	8270	2,4-DINITROTOLUENE	121-14-2	1000	Below MDL	ug/Kg
\$06018	8270	DIETHYLPHTHALATE	84-66-2	1000	Below MDL	ug/Kg
\$06018	8270	4-CHLOROPHENYL-PHENYL ETHER	7005-72-3	1000	Below MDL	ug/Kg
\$06018	8270	FLUORENE	86-73-7	1000	Below MDL	ug/Kg
\$06018	8270	4-NITROANILINE	100-01-6	1000	Below MDL	ug/Kg
\$06018	8270	4,6-DINITRO-2-METHYLPHENOL	534-52-1	5000	Below MDL	ug/Kg
\$06018	8270	N-NITROSODIPHENYLAMINE	86-30-6	1000	Below MDL	ug/Kg
\$06018	8270	4-BROMOPHENYL-PHENYL ETHER	101-55-3	1000	Below MDL	ug/Kg
\$06018	8270	HEXACHLOROBENZENE	118-74-1	1000	Below MDL	ug/Kg
\$06018	8270	PENTACHLOROPHENOL	87-86-5	5000	Below MDL	ug/Kg
\$06018	8270	PHENANTHRENE	85-01-8	1000	Below MDL	ug/Kg
\$06018	8270	ANTHRACENE	120-12-7	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-BUTYLPHTHALATE	84-74-2	1000	Below MDL	ug/Kg
\$06018	8270	FLUORANTHENE	206-44-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZIDINE	92-87-5	7999	Below MDL	ug/Kg
\$06018	8270	PYRENE	129-00-0	1000	Below MDL	ug/Kg
\$06018	8270	BUTYLBENZYLPHTHALATE	85-68-7	1000	Below MDL	ug/Kg
\$06018	8270	3,3'-DICHLOROBENZIDINE	91-94-1	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)ANTHRACENE	56-55-3	1000	Below MDL	ug/Kg
\$06018	8270	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1000	Below MDL	ug/Kg
\$06018	8270	CHRYSENE	218-01-9	1000	Below MDL	ug/Kg
\$06018	8270	DI-N-OCTYL PHTHALATE	117-84-0	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(B)FLUORANTHENE	205-99-2	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(K)FLUORANTHENE	207-08-9	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(A)PYRENE	50-32-8	1000	Below MDL	ug/Kg
\$06018	8270	INDENO(1,2,3-CD)PYRENE	193-39-5	1000	Below MDL	ug/Kg
\$06018	8270	DIBENZO(A,H)ANTHRACENE	53-70-3	1000	Below MDL	ug/Kg
\$06018	8270	BENZO(G,H,I)PERYLENE	191-24-2	1000	Below MDL	ug/Kg
\$08009	8015	*****TPH 8015 MOD (SOIL)***		----	*****	mg/Kg
\$08009	8015	GASOLINE		10	Below MDL	mg/Kg
\$08009	8015	KEROSENE		10	Below MDL	mg/Kg

FAXED

JUN 03 1994

#Pages

Sample ID AA07355

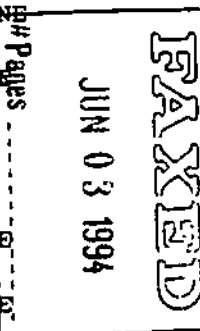
Date Analyzed 05/31/94

Date Sampled 05/25/94

Sample Description 3326B, SB9-3'

Time Sampled 16:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08009	8015	DIESEL		10	Below MDL	mg/Kg
\$08025	8260	***VOLATILES (GC/MS) (SOIL)***		----	*****	ug/Kg
\$08025	8260	DICHLORODIFLUOROMETHANE	75-71-8	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROMETHANE	74-87-3	10.0	Below MDL	ug/Kg
\$08025	8260	VINYL CHLORIDE	75-01-4	10.0	Below MDL	ug/Kg
\$08025	8260	BROMOMETHANE	74-83-9	10.0	Below MDL	ug/Kg
\$08025	8260	CHLOROETHANE	75-00-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROFLUOROMETHANE	75-69-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHENE	75-35-4	5.0	Below MDL	ug/Kg
\$08025	8260	METHYLENE CHLORIDE	75-09-2	10.0	Below MDL	ug/Kg
\$08025	8260	CARBON DISULFIDE	75-15-0	5.0	Below MDL	ug/Kg
\$08025	8260	ACRYLONITRILE	107-13-1	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,2-DICHLOROETHENE	156-60-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROETHANE	75-34-3	5.0	Below MDL	ug/Kg
\$08025	8260	2,2-DICHLOROPROPANE	594-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,2-DICHLOROETHENE	156-59-2	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROFORM	67-66-3	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOCHLOROMETHANE	74-97-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1-TRICHLOROETHANE	71-55-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1-DICHLOROPROPENE	563-58-6	5.0	Below MDL	ug/Kg
\$08025	8260	CARBON TETRACHLORIDE	56-23-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROETHANE	106-06-2	5.0	Below MDL	ug/Kg
\$08025	8260	BENZENE	71-43-2	5.0	Below MDL	ug/Kg
\$08025	8260	TRICHLOROETHENE	79-01-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROPROPANE	78-87-5	5.0	Below MDL	ug/Kg
\$08025	8260	BROMODICHLOROMETHANE	75-27-4	5.0	Below MDL	ug/Kg
\$08025	8260	DIBROMOMETHANE	74-95-3	5.0	Below MDL	ug/Kg
\$08025	8260	4-METHYL-2-PENTANONE	106-10-1	10.0	Below MDL	ug/Kg
\$08025	8260	2-HEXANONE	591-78-6	10.0	Below MDL	ug/Kg
\$08025	8260	CIS-1,3-DICHLOROPROPENE	10061-01-5	5.0	Below MDL	ug/Kg
\$08025	8260	TOLUENE	108-88-3	5.0	Below MDL	ug/Kg
\$08025	8260	TRANS-1,3-DICHLOROPROPENE	10061-02-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2-TRICHLOROETHANE	79-00-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROPROPANE	142-28-9	5.0	Below MDL	ug/Kg
\$08025	8260	TETRACHLOROETHENE	127-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLORODIBROMOMETHANE	124-48-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMOETHANE	106-93-4	5.0	Below MDL	ug/Kg
\$08025	8260	CHLOROBENZENE	108-90-7	5.0	Below MDL	ug/Kg
\$08025	8260	ETHYLBENZENE	100-41-4	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,1,2-TETRACHLOROETHANE	630-20-6	5.0	Below MDL	ug/Kg
\$08025	8260	XYLENE (TOTAL)	1330-20-7	5.0	Below MDL	ug/Kg
\$08025	8260	STYRENE	100-42-5	5.0	Below MDL	ug/Kg
\$08025	8260	ISOPROPYLBENZENE	98-82-8	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOFORM	75-25-2	5.0	Below MDL	ug/Kg
\$08025	8260	1,1,2,2-TETRACHLOROETHANE	79-34-5	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROPROPANE	96-18-4	5.0	Below MDL	ug/Kg
\$08025	8260	N-PROPYLBENZENE	103-65-1	5.0	Below MDL	ug/Kg
\$08025	8260	BROMOBENZENE	108-86-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,3,5-TRIMETHYLBENZENE	108-67-8	5.0	Below MDL	ug/Kg
\$08025	8260	2-CHLOROTOLUENE	95-49-8	5.0	Below MDL	ug/Kg
\$08025	8260	4-CHLOROTOLUENE	106-43-4	5.0	Below MDL	ug/Kg
\$08025	8260	TERT-BUTYLBENZENE	98-06-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRIMETHYLBENZENE	95-63-6	5.0	Below MDL	ug/Kg
\$08025	8260	SEC-BUTYLBENZENE	135-98-8	5.0	Below MDL	ug/Kg



Sample ID AA07355

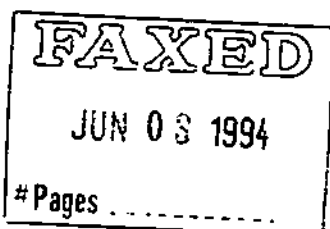
Date Analyzed 05/31/94

Date Sampled 05/25/94

Sample Description 3326B, SB9-3'

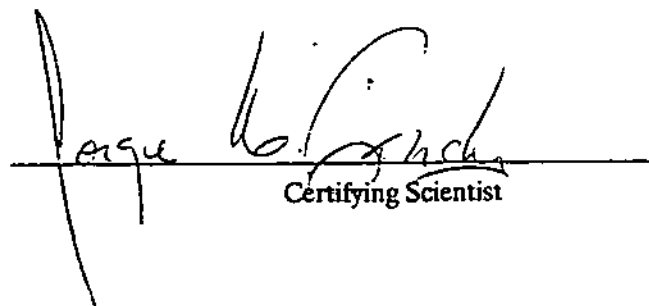
Time Sampled 16:30

Test Code	Method	Analyte	CAS No.	MDL	Result	Unit
\$08025	8260	P-ISOPROPYLTOLUENE	99-87-6	5.0	Below MDL	ug/Kg
\$08025	8260	1,3-DICHLOROBENZENE	541-73-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,4-DICHLOROBENZENE	106-46-7	5.0	Below MDL	ug/Kg
\$08025	8260	N-BUTYLBENZENE	104-51-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DICHLOROBENZENE	95-50-1	5.0	Below MDL	ug/Kg
\$08025	8260	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,4-TRICHLOROBENZENE	102-82-1	5.0	Below MDL	ug/Kg
\$08025	8260	HEXACHLOROBUTADIENE	87-68-3	5.0	Below MDL	ug/Kg
\$08025	8260	NAPHTHALENE	91-20-3	5.0	Below MDL	ug/Kg
\$08025	8260	1,2,3-TRICHLOROBENZENE	87-61-6	5.0	Below MDL	ug/Kg



Clinically Proven...

Environmentally Sound!

  
Certifying Scientist

**BEFORE THE**  
**OHIO ENVIRONMENTAL PROTECTION AGENCY**

OHIO E.P.A.  
MAR 13 2001  
ENTERED DIRECTOR'S JOURNAL

**In the Matter of:**

**Kimberly-Clark Corporation  
1400 Holcomb Bridge Road  
Roswell, Georgia 30076-2199**

**Director's Final  
Findings and Orders**

**I. JURISDICTION**

1. These Director's Final Findings and Orders ("Orders") are issued pursuant to the authority vested in the Director of the Ohio EPA under Sections 3734.13, 3734.20, 6111.03, and 3745.01 of the Ohio Revised Code.

**II. PARTIES BOUND**

2. These Orders shall apply to and be binding upon Kimberly-Clark Corporation ("Kimberly-Clark"), its agents, successors, and assigns.

3. No change in ownership or corporate status of Kimberly-Clark including, but not limited to, any transfer of assets or real or personal property shall in any way alter Kimberly-Clark's obligations under these Orders.

4. Kimberly-Clark shall provide a copy of these Orders to all contractors, subcontractors, laboratories and consultants retained to perform any portion of the Work performed pursuant to these Orders. Kimberly-Clark shall ensure that all contractors, subcontractors, laboratories and consultants retained to perform Work pursuant to these Orders comply with the provisions of these Orders.

**III. DEFINITIONS**

5. Unless otherwise expressly provided herein, terms used in these Orders or in any appendices shall have the same meaning as used in Chapters 3734 and 6111 of the Ohio Revised Code. Whenever the terms listed below are used in these Orders or in any appendices, attached hereto and incorporated herein, the following definitions shall apply:

a. "Day" shall mean a calendar day unless expressly stated to be a business day. "Business day" shall mean a day other than a Saturday, Sunday, or State Holiday. In computing any period of time under these Orders, where the last day would fall on a Saturday, Sunday, or State Holiday, the period shall run until the close of the next business day.

b. "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan, codified at 40 C.F.R. Part 300 (1990), as amended.

c. "Ohio EPA" shall mean the Ohio Environmental Protection Agency and its designated representatives.

d. "Paragraph" shall mean a portion of these Orders identified by an Arabic numeral or an upper or lower case letter.

e. "Parties" shall mean Kimberly-Clark and the Ohio EPA.

f. "Risk Assessment Guidance for Superfund" ("**RAGS**") shall mean RAGS: Volume 1 - Human Health Evaluation Manual, Part B, Development of Risk-based Preliminary Remediation Goals, OSWER Directive 9285.7-01B, December, 1991, Interim attached hereto and incorporated herein as Attachment B of these Orders.

g. "Section" shall mean a portion of these Orders identified by a roman numeral.

h. "Site" shall mean the property located at 518 East Water Street, Troy, Miami County, Ohio, commonly referred to as "Brown-Bridge Plant 1," where the treatment, storage, and/or disposal of hazardous waste, and/or the discharge into waters of the state of industrial waste or other waste has occurred, including any other area where such hazardous wastes, industrial wastes, and/or other wastes have migrated or threaten to migrate.

i. "Waste Material" shall mean (1) any "hazardous waste" under Section 3734.01(J) of the Ohio Revised Code; (2) any "solid waste" under Section 3734.01(E) of the Ohio Revised Code; (3) any "industrial waste" under Section 6111.01(C) of the Ohio Revised Code; and (4) any "other waste" under Section 6111.01(D) of the Ohio Revised Code.

j. "Work" shall mean all activities Kimberly-Clark is required to perform under these Orders.

#### **IV. FINDINGS OF FACT, DETERMINATIONS, AND CONCLUSIONS OF LAW**

6. All findings of fact, determinations, and conclusions of law necessary for the issuance of these Orders pursuant to Sections 3734.13, 3734.20, 3745.01 and 6111.03 of the Ohio Revised Code have been made and are outlined below. Ohio EPA has determined the following:

a. Kimberly-Clark acquired the property located at 518 East Water Street in Troy, Miami County, Ohio (the "Site") as a result of a merger with Brown-Bridge Mills, Inc. on December 31, 1977. The Site consists of approximately 5 acres of land adjacent to the flood plain of the Great Miami River. Prior to September, 1994, the Site was used for the manufacture of pressure, moisture, and heat sensitive stock for labels, stamps, and related items.

b. Brown-Bridge Industries acquired the Site from Kimberly-Clark on September 16, 1994. In 1998, Brown-Bridge Industries changed its name to Spinnaker Coating, Inc. ("Spinnaker"). Spinnaker continues to utilize this facility for the manufacture of pressure, moisture, and heat sensitive stock for labels, stamps, and related items.

c. Toluene, as product, was stored in bulk tanks at the bulk storage area at the west end of the Site. The Site formerly contained a toluene recovery system at the west end which included a 3000 gallon flow through process tank. The flow through process tank was removed in 1988.

d. There are known to have been at least four instances of releases at the Site, including the following:

i. According to Kimberly-Clark, during due diligence interviews associated with the sale of the Site to Brown-Bridge, it was discovered that in 1986 or 1987, approximately 15 to 25 gallons of toluene overflowed from a virgin toluene tank at the bulk chemical storage tank location on the Site's west end.

ii. According to Kimberly-Clark, in July, 1988, above-ground piping to a toluene storage tank was found to be leaking during a regularly scheduled tank-tightness test. The quantity discharged during this release has not been determined.

iii. According to an initial pollution incident report prepared by Ohio EPA, an

estimated 4000 pounds of toluene leaked into the atmosphere over several days prior to its discovery on April 12, 1989. The leak apparently was due to a malfunctioning steam valve at the toluene recovery system.

iv. According to an initial pollution incident report prepared by Ohio EPA, an estimated 500 gallons of toluene leaked from the toluene recovery system to the ground underneath the system on January 25, 1994.

e. Analysis of ground-water samples from the Site conducted by Kimberly-Clark in October, 1993 and July, 1994 showed the presence of the following compounds at levels presented below:

Chemical	Concentration ( $\mu\text{g/l}$ )
Toluene	320,000
Benzene	62
1,1,1-Trichloroethane	270
Tetrachloroethene	28
Trichloroethene	400
Vinyl Chloride	170
Cis-1,2-dichloroethene	230

f. Contaminated ground water at the Site is located approximately 900 feet upgradient from a City of Troy production well. According to the City's well head protection program, the Site is located within the one-year capture zone of the City's well field.

g. Kimberly-Clark's consultant, Applied Engineering & Science, Inc. (AES), in a report dated August, 1994, determined that ground-water contamination is migrating downgradient in a northeasterly direction off the Site onto adjacent property.

h. Two areas of soil and ground water contamination, on the east and west portions of the property, were identified by AES.

i. In April 1995, approximately 1525 cubic yards of contaminated soils were excavated and removed from the bulk storage and nonhazardous waste storage areas of the Site. Soil samples collected from these areas contained trichloroethene at concentrations up to 29,000  $\mu\text{g}/\text{kg}$ , 1,1,1-trichloroethane at concentrations up to 1400  $\mu\text{g}/\text{kg}$ , and tetrachloroethene at concentrations up to 790  $\mu\text{g}/\text{kg}$ .

j. The material excavated from the bulk storage area was placed in roll-off containers. One container was manifested as hazardous waste due to its trichloroethene content.

k. In the summer of 1995, a ground water treatment system was installed on the west end of the property and an air sparging/vapor extraction system was installed on the east end. Both systems began operation on September 6, 1995.

l. In February 1997, Kimberly-Clark and Brown-Bridge determined that, according to ground water monitoring, their cleanup goals had been reached for the east end. The air sparging stopped in March 1997, while vapor extraction continued until January 1998.

m. The West End pump-and-treat system consists of four pumping wells and an air stripper to treat the water. The treated water was discharged to the Great Miami River under a NPDES discharge permit.

n. Ohio EPA invited Kimberly-Clark to negotiate an administrative order for the performance of a Remedial Investigation and Feasibility Study ("RI/FS") in 1997. At that time, Kimberly-Clark declined to enter into the administrative order stating that "continuation of the voluntary cleanup appears to be the most cost effective way to insure completion of the Site cleanup." Ohio EPA decided to change the scope of work from an RI/FS to operation and maintenance of the West End pump and treat system, with a provision for periodic evaluation of the effectiveness of the system. Kimberly-Clark declined to enter into an order that included the evaluation of effectiveness provision.

o. In a letter dated February 14, 2001, Kimberly-Clark stated that it had "completed the soil and ground water remediation project at Spinnaker Coating Facility ..." and that it planned to shut down the system on March 1, 2001. In response to this letter, Ohio EPA sent correspondence to Kimberly-Clark on February 27, 2001 asking that the system not be shut down because of concerns that the City of Troy's public water supply wells could be jeopardized. Ohio EPA suggested that a meeting take place before any action was taken and asked for possible dates to meet. On March 1, 2001, Kimberly-Clark proceeded to shut down the pump and treat system without waiting to meet with Ohio EPA to hear Ohio EPA's concerns.



p. Kimberly-Clark collected ground-water samples on a quarterly basis from the pumping wells and monitoring wells at the Site. The analytical results for vinyl chloride from pumping wells 3 and 4 and vinyl chloride and trichloroethene from pumping well 3 and monitoring well KMW-9 for the years 1999 and 2000 follow. The results show that the concentrations of vinyl chloride and trichloroethene exceed Federal and state drinking water maximum contaminant levels (MCLs). Pumping wells 3 and 4 and monitoring well KMW-9 lie between the bulk storage area and Troy's east well field.

*Vinyl Chloride*

<i>Well</i>	3/15/99	6/16/99	9/2/99	12/16/99	3/1/00	6/6/00	9/7/00	12/13/00
PW-3	<b>6</b>	<b>7</b>	<b>13</b>	n	<b>2.0</b>	<b>6.7</b>	<b>9.2</b>	<b>8.0</b>
PW-4	n	<b>3</b>	1	1.1	n	n	n	<b>3.7</b>

*Trichloroethene*

<i>Well</i>	3/15/99	6/16/99	9/2/99	12/16/99	3/1/00	6/6/00	9/7/00	12/13/00
PW-3	3	<b>9</b>	3	1.1	2.1	3.4	<b>12</b>	<b>9.5</b>
KMW-9	1	<b>12</b>	n	<b>7.8</b>	2.6	n	<b>16</b>	<b>7.4</b>

Notes:

All values are in  $\mu\text{g/l}$ .

n - not detected

**Boldface** denotes values greater than federal and state drinking water MCLs.

The MCL for vinyl chloride is  $2.0 \mu\text{g/l}$ .

The MCL for trichloroethene is  $5.0 \mu\text{g/l}$ .

q. On May 23, 24 and 25, 2000, Ohio EPA collected ground-water samples from borings RS02, RS03, RS04, and RS06 along the northeast side of the Spinnaker building between the facility and Troy's east well field. Trichloroethene was detected in boring RS02 at  $72 \mu\text{g/l}$ , in boring RS03 at  $70 \mu\text{g/l}$ , in boring RS04 at  $5 \mu\text{g/l}$ , and in boring RS06 at  $9.6 \mu\text{g/l}$ . Vinyl chloride was detected in boring RS04 at  $3.5 \mu\text{g/l}$  and in boring RS06 at  $2.8 \mu\text{g/l}$ .

r. Trichloroethene and tetrachloroethene in soil and ground water will degrade to form cis-1,2-dichloroethene. Analysis performed during the excavation and removal of soils from the Site did not include cis-1,2-dichloroethene, which has been detected in Site wells. Generally, wells downgradient from the bulk storage and nonhazardous waste storage areas have shown higher concentrations of cis-1,2-dichloroethene than upgradient

wells.

s. The City of Troy analyzes its well water for volatile organic compounds periodically (generally, once per quarter). Cis-1,2-dichloroethene has been detected in Troy's east well field since 1988. Trichloroethene was detected in the east well field in 1990.

t. Ohio EPA conducted a pump test of the aquifer beneath the Site in November, 2000. The pump test demonstrated that shallow ground water beneath the Site is hydraulically connected to Troy's east well field, that contaminants in ground water at the Site will migrate to the east well field, and that the Great Miami River does not form a hydraulic barrier preventing the migration of contaminants from the site to the east well field.

u. Without the operation of the ground-water pump and treat system, increased concentrations of trichloroethene, cis-1,2-dichloroethene, and vinyl chloride will migrate to Troy's east well field.

v. Kimberly-Clark is a "person" as defined under Section 3734.01(G) of the Ohio Revised Code.

w. Because of their quantity, concentration, or physical or chemical characteristics, the Director has determined that toluene, benzene, 1,1,1-trichloroethane, tetrachloroethene, trichloroethene, vinyl chloride, cis-1,2-dichloroethene and other contaminants found at the Site are "hazardous wastes" as defined under Section 3734.01(J) of the Ohio Revised Code.

x. The Site is a hazardous waste facility, solid waste facility, or other location where hazardous waste was treated, stored, or disposed.

y. Conditions at the Site constitute a substantial threat to public health or safety or are causing or contributing or threatening to cause or contribute to air or water pollution or soil contamination.

z. Kimberly-Clark is a "person" as defined under Section 6111.01(I) of the Ohio Revised Code.

aa. The toluene, benzene, 1,1,1-trichloroethane, tetrachloroethene, trichloroethene, vinyl chloride, cis-1,2-dichloroethene, and other contaminants found at the Site are "industrial wastes" or "other wastes" as defined under Section 6111.01 of the Ohio

Revised Code.

bb. The ground water and surface water at the Site are "waters of the state" as defined under Section 6111.01(H) of the Ohio Revised Code.

cc. The Work required by these Orders will contribute to the prohibition or abatement of the discharge of industrial wastes or other wastes into the waters of the state.

dd. In issuing these Orders, the Director has given consideration to, and based his determination on, evidence relating to the technical feasibility and economic reasonableness of complying with these Orders and to evidence relating to conditions calculated to result from compliance with these Orders, and their relation to benefits to the people of the state to be derived from such compliance.

ee. Based upon information available to the Director as set forth in these Findings of Fact, the Director has determined that the work required by these Orders, set forth below, is in the nature of interim measures only, designed to contain, abate, mitigate and control contamination. The Director has given consideration to the evidence related to documented activities which have occurred and/or will occur at the Site. Based upon the facts presented, the Director believes that issuance of these Orders is furthering the intent of the General Assembly, that Ohio EPA will prevent, control or abate pollution of the environment for the protection and preservation of the health, safety, welfare and property of the people of the State.

## **V. GENERAL PROVISIONS**

### **7. Objectives of the Orders**

The objective of the Ohio EPA in issuing these Orders is to contribute to the protection of public health, safety, and welfare and the environment from the disposal, discharge, or release of Waste Material at the Site through the continued implementation and monitoring of the West End ground water pump and treatment system by Kimberly-Clark. Kimberly-Clark shall perform the Work in accordance with these Orders, including but not limited to, relevant guidance documents, and all standards, specifications, and schedules set forth in or developed pursuant to these Orders.

### **8. Compliance With Law**

a. All activities undertaken by Kimberly-Clark pursuant to these Orders shall be performed in accordance with the requirements of all applicable federal and state laws

and regulations.

b. Kimberly-Clark shall perform the activities required pursuant to these Orders in a manner which is not inconsistent with the NCP.

c. Where any portion of the Work requires a permit or approval, Kimberly-Clark shall timely submit applications and take all other actions necessary to obtain such permits or approval. These Orders are not, and shall not be construed to be, a permit issued pursuant to any statute or regulation.

## **VI. PERFORMANCE OF THE WORK**

9. Within five (5) days of the issuance of these Orders, Kimberly-Clark shall resume operation of the existing West End ground-water pump and treatment system described in the Site Remediation Report, found in Attachment A, until such time as the interim action ground-water compliance (IAGWC) standards described in Section VI., Paragraph 16 (a-d) of these Orders, are met and confirmed by the Ohio EPA. Kimberly-Clark shall maintain the West End ground water pump and treat system during its operation.

10. Kimberly-Clark shall evaluate the effectiveness of the West End ground-water pump and treatment system in preventing further migration of contamination from sources at the Site in accordance with the following provisions:

- a. Within 45 days of the issuance of these Orders, Kimberly-Clark shall submit a work plan for evaluating the effectiveness of the West End ground-water pump and treatment system in preventing further migration of contamination from sources at the Site. The evaluation shall include the measurement of aquifer properties at the Site including vertical and horizontal hydraulic conductivity, specific yield, and gradient. The evaluation shall estimate the capture zone of the pumping wells using both empirical data collected from the Site and mathematical modeling. All models used to estimate the capture zones of the pumping wells shall be calibrated and verified. Scale drawings showing the estimated vertical and horizontal extent of the capture zones for the pumping wells shall be prepared. The work plan shall include a fixed-date schedule for conducting the evaluation and submitting a final report on the evaluation to Ohio EPA.
- b. The work plan and final report shall be subject to the review, approval, or disapproval of Ohio EPA, in accordance with the provisions set

forth in Section XI of these Orders.

- c. Upon Ohio EPA's approval of the work plan, Kimberly-Clark shall implement the Work detailed therein in accordance with the schedule contained in the approved work plan.

11. Kimberly-Clark shall collect and analyze ground-water samples from all operating pumping wells on a quarterly basis.

12. Kimberly-Clark shall collect and analyze ground-water samples from the following Site wells on a quarterly basis: PW-1, PW-2, PW-3, PW-4, KMW-5, KMW-6, KMW-7, KMW-8, KMW-9, EEIB-2, EEIB-4, EEIB-12, GZA-1, RS04, and RS06.

13. Kimberly-Clark shall continue to collect water level measurements from the following Site wells on a quarterly basis: PW-1, PW-2, PW-3, PW-4, KMW-1, KMW-2, KMW-3, KMW-4, KMW-5, KMW-6, KMW-7, KMW-8, KMW-9, EEIB-2, EEIB-4, EEIB-7, EEIB-8, EEIB-9, EEIB-11, EEIB-12, GZA-1, GZA-2, RS04, and RS06.

14. Ground water samples shall be analyzed by EPA Method SW846-8260, with low detection limits (25 ml purge).

15. Ohio EPA may modify any portion of the ground-water monitoring program. Ohio EPA shall notify Kimberly-Clark in writing if any such modifications are determined to be warranted.

16. **IAGWC** standards shall be determined according to the following procedure:

- a. The Site contaminants of concern ("**COC**") are trichloroethene and vinyl chloride.
- b. For each COC, identify the corresponding maximum contaminant level ("**MCL**") and calculate the residential water carcinogenic effects remediation goal ( $10^{-5}$ ) and the residential water non-carcinogenic effects remediation goal ( $HI=1$ ) using equations 1' and 2' on pages 21 and 22 of the Risk Assessment Guidance for Superfund, Part B, found in Attachment B of these Orders. When using equation 1', substitute a target excess individual lifetime cancer risk value of  $10^{-5}$  into the equation.
- c. For each COC, select the lowest concentration from among the MCL,

the carcinogenic risk-based remediation goal, and the non-carcinogenic risk-based remediation goal.

- d. The value obtained in item "c" above becomes the IAGWC standard unless the value is less than 1.0 part per billion in which case 1.0 part per billion becomes the IAGWC standard.

17. Kimberly-Clark may petition the Ohio EPA to cease operation of the West End ground-water pump and treatment system should ground-water sampling and analysis indicate that the concentrations of each COC are less than the IAGWC standards for four consecutive quarters in the following wells: PW-1, PW-2, PW-3, PW-4, KMW-6, KMW-7, KMW-8, KMW-9, EEIB-2, EEIB-12, RS04, and RS06. Kimberly-Clark shall resample the ground-water approximately one week following receipt of the fourth consecutive quarter's sampling results to confirm whether the concentrations of each COC are less than the IAGWC standards. Following receipt of written concurrence from the Ohio EPA that the concentrations of each COC are less than the IAGWC standards, Kimberly-Clark may cease operation of the West End ground-water pump and treatment system.

18. Following the Ohio EPA-approved cessation of operation of the West End ground-water pump and treatment system, Kimberly-Clark shall continue to maintain the treatment system in such a manner as to allow for the resumed operation of the treatment system, if resumed operation of the system is required by Ohio EPA due to any exceedance of the IAGWC standards.

19. Following Ohio EPA-approved cessation of operation of the West End ground-water pump and treatment system, Kimberly-Clark shall continue ground-water analytical sampling on a quarterly basis for Site wells listed in Section VI., Paragraphs 12 and 13 of these Orders. If Kimberly-Clark's sampling results indicate that IAGWC standards have been exceeded during any sampling event, Kimberly-Clark shall resample the ground water approximately one week following receipt of the initial sampling results to confirm whether IAGWC standards have been exceeded. If the resampling results confirm that the IAGWC standards have been exceeded, Kimberly-Clark shall resume operation of the West End ground-water pump and treatment system, including the resumption of quarterly water level measurements, and continue quarterly ground-water analytical sampling. Kimberly-Clark shall notify Ohio EPA within twenty-four (24) hours of the resumption of operation of the treatment system if the sampling and resampling, as described above, show that the IAGWC standards have been exceeded.

20. These Orders shall not be eligible for termination pursuant to Section XVI, Termination, until eight (8) consecutive quarters of ground-water sampling and analysis

have demonstrated continued compliance with the IAGWC standards.

## **VII. SAMPLING AND DATA AVAILABILITY**

21. Kimberly-Clark shall notify Ohio EPA not less than fifteen (15) days in advance of all sample collection activity. Kimberly-Clark shall allow split and/or duplicate samples to be taken by Ohio EPA. Ohio EPA shall also have the right to take any additional samples it deems necessary.

22. Within seven (7) days of a request by Ohio EPA, Kimberly-Clark shall submit to Ohio EPA copies of the results of all sampling and/or tests or other data, including raw data and original laboratory reports, generated by or on behalf of Kimberly-Clark with respect to the Site and/or the implementation of these Orders. Kimberly-Clark may submit to Ohio EPA any interpretive reports and written explanations concerning the raw data and original laboratory reports. Such interpretive reports and written explanations shall not be submitted in lieu of original laboratory reports and raw data. Should Kimberly-Clark subsequently discover an error in any report or raw data, Kimberly-Clark shall promptly notify Ohio EPA of such discovery and provide the correct information within seven (7) days.

## **VIII. ACCESS**

23. Ohio EPA shall have access at all times to the Site and any other property to which access is required for the implementation of these Orders, to the extent access to the property is controlled by Kimberly-Clark. Access under these Orders shall be for the purposes of conducting any activity related to these Orders including, but not limited to the following:

- a. monitoring the Work;
- b. conducting sampling;
- c. inspecting and copying records, operating logs, contracts, and/or other documents related to the implementation of these Orders;
- d. conducting investigations and tests related to the implementation of these Orders; and
- e. verifying any data and/or other information submitted to Ohio EPA.

24. To the extent that the Site or any other property to which access is required for the implementation of these Orders is owned or controlled by persons other than Kimberly-Clark, Kimberly-Clark shall use its best efforts to secure from such persons access for Kimberly-Clark and Ohio EPA as necessary to effectuate these Orders. Copies of all access agreements obtained by Kimberly-Clark shall be provided promptly to Ohio EPA. If any access required to effectuate these Orders is not obtained within thirty (30) days of the effective date of these Orders, or within thirty (30) days of the date Ohio EPA notifies Kimberly-Clark in writing that additional access beyond that previously secured is necessary, Kimberly-Clark shall promptly notify the Ohio EPA in writing of the steps Kimberly-Clark has taken to attempt to obtain access.

25. Notwithstanding any provision of these Orders, the State of Ohio retains all of its access rights and authorities, including enforcement authorities related thereto, under any applicable statute or regulations.

#### **IX. DESIGNATED SITE COORDINATORS**

26. Within five (5) days of the effective date of these Orders, Kimberly-Clark shall notify Ohio EPA, in writing, of the name, address and telephone number of its designated Site Coordinator and Alternate Site Coordinator. If a designated Site Coordinator or Alternate Site Coordinator is changed, the identity of the successor shall be given to the other Party at least five (5) days before the changes occur, unless impracticable, but in no event later than the actual day the change is made.

27. To the maximum extent practicable, except as specifically provided in these Orders, communications between Kimberly-Clark and Ohio EPA concerning the implementation of these Orders shall be made between the Site Coordinators. Kimberly-Clark's Site Coordinator shall be available for communication with Ohio EPA regarding the implementation of these Orders for the duration of these Orders. Each Site Coordinator shall be responsible for assuring that all communications from the other Party are appropriately disseminated and processed. Kimberly-Clark's Site Coordinator or alternate shall be present on the Site or on call during all hours of Work at the Site.

28. Without limitation of any authority conferred on Ohio EPA by statute or regulation, Ohio EPA Site Coordinator's authority includes, but is not limited to the following:

a. taking samples and directing the type, quantity and location of samples to be taken by Kimberly-Clark pursuant to an approved work plan;



b. observing, taking photographs, or otherwise recording information related to the implementation of these Orders, including the use of any mechanical or photographic device;

c. directing that the Work stop whenever the Site Coordinator for Ohio EPA determines that the activities at the Site may create or exacerbate a threat to public health or safety, or threaten to cause or contribute to air or water pollution or soil contamination;

d. conducting investigations and tests related to the implementation of these Orders;

e. inspecting and copying records, operating logs, contracts and/or other documents related to the implementation of these Orders; and

f. assessing Kimberly-Clark's compliance with these Orders.

#### **X. PROGRESS REPORTS AND NOTICE**

29. Unless otherwise directed by Ohio EPA, Kimberly-Clark shall provide quarterly progress reports to the Ohio EPA concerning the work carried out by Kimberly-Clark during the previous quarter. The quarters shall be divided into the following reporting periods: the First Quarter shall be months January through March; the Second Quarter shall be months April through June; the Third Quarter shall be months July through September; and the Fourth Quarter shall be months October through December. The quarterly progress reports shall be submitted by the tenth (10) day of the first month following the reporting period. The quarterly progress reports shall include, at a minimum, the following information:

a. a description of the status of the Work and progress to date;

b. summaries of all changes made in the interim measures during the reporting period;

c. summaries of all contacts with representatives of the City of Troy, local community, public interest groups, county and state agencies, and government during the reporting period concerning the Work being done as a result of these Orders;

d. summaries of all relevant findings including, but not limited to, water level measurements, flow maps, etc., from Site wells listed in Section VI., Paragraph 13 of these

Orders;

e. summaries of all relevant findings including, but not limited to, analytical sampling results, etc., from Site wells listed in Section VI., Paragraphs 11 and 12 of these Orders;

f. an accounting of how much contaminated ground water was pumped during the reporting period;

g. a description of the difficulties encountered during the reporting period;

h. a description of the actions taken to rectify any difficulties encountered;

i. a description of activities planned for the next quarter; and

j. an identification of changes in key project personnel.

30. Progress reports and all other documents required to be submitted pursuant to these Orders shall be sent by certified mail return receipt requested, or equivalent, to the following address, or to such other address as directed by Ohio EPA:

Ohio Environmental Protection Agency  
Lazarus Government Center  
P.O. Box 1049  
Columbus, Ohio 43216-1049  
ATTN: DERR Records Room

Ohio EPA  
Southwest District Office  
401 East Fifth Street  
Dayton, Ohio 45402  
ATTN: Brown Bridge Site Coordinator, DERR

## **XI. REVIEW OF SUBMITTALS**

31. Ohio EPA will review any work plan, report, or other item required to be submitted pursuant to these Orders. Upon review, Ohio EPA may in its sole discretion: (a) approve the submission in whole or in part; (b) approve the submission upon specified conditions; (c) modify the submission; (d) disapprove the submission in whole or in part, notifying Kimberly-Clark of deficiencies; or (e) any combination of the above.

32. In the event of Ohio EPA's approval, approval upon condition, or modification of any submission, Kimberly-Clark shall proceed to take any action required by the submission as approved, conditionally approved, or modified by Ohio EPA.

33. In the event that Ohio EPA initially disapproves a submission, in whole or in part, and notifies Kimberly-Clark of the deficiencies, Kimberly-Clark shall, within fourteen (14) days, or such longer period of time as specified by Ohio EPA in writing, correct the deficiencies and resubmit to Ohio EPA for approval a revised submission. The revised submission shall incorporate all of the changes, additions, and/or deletions specified by Ohio EPA in its notice of deficiency. Notwithstanding the notice of deficiency, Kimberly-Clark shall proceed to take any action required by a non-deficient portion of the submission.

34. In the event that Ohio EPA disapproves a revised submission, in whole or in part, Ohio EPA may require Kimberly-Clark to correct the deficiencies and incorporate all changes, additions, and/or deletions within fourteen (14) days, or such period of time as specified by Ohio EPA in writing. Or, in the alternative, Ohio EPA retains the right to terminate these Orders, perform any additional remediation, conduct further Investigation, and/or enforce the terms of these Orders.

35. All work plans, reports, or other items required to be submitted to Ohio EPA under these Orders shall, upon approval by Ohio EPA, be deemed to be incorporated in and made an enforceable part of these Orders. In the event that Ohio EPA approves a portion of a work plan, report, or other item, the approved portion shall be deemed to be incorporated in and made an enforceable part of these Orders.

## **XII. RESERVATION OF RIGHTS**

36. Ohio EPA reserves the right to seek legal and/or equitable relief to enforce the terms and conditions of these Orders, including penalties against Kimberly-Clark for noncompliance with these Orders.

37. Ohio EPA reserves the right to terminate these Orders and/or perform all or any portion of the Work or any other measures, including but not limited to conducting further investigation and/or remediation, in the event that the requirements of these Orders are not wholly complied with within the time frames required by these Orders.

38. Ohio EPA reserves the right to take any action, including but not limited to any enforcement action, action to recover costs, or action to recover damages to natural

resources, pursuant to any available legal authority as a result of past, present, or future violations of state or federal laws or regulations or the common law, and/or as a result of events or conditions arising from, or related to, the Site. Upon termination of these Orders pursuant to Section XVI, Termination, Kimberly-Clark shall have resolved its liability to Ohio EPA only for the Work performed pursuant to these Orders.

### **XIII. ACCESS TO INFORMATION**

39. Kimberly-Clark shall provide to Ohio EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to events or conditions at the Site including, but not limited to manifests, reports, correspondence, or other documents or information related to the Work.

40. Kimberly-Clark may assert a claim that documents or other information submitted to the Ohio EPA pursuant to these Orders is confidential under the provisions of Rule 3745-50-30(A) of the Ohio Administrative code or Section 6111.05(A) of the Ohio Revised Code. If no such claim of confidentiality accompanies the documents or other information when it is submitted to Ohio EPA, it may be made available to the public without notice to Kimberly-Clark.

41. Kimberly-Clark may assert that certain documents or other information are privileged under the attorney-client or any other privilege recognized by state law. If Kimberly-Clark makes such an assertion, it shall provide Ohio EPA with the following: (1) the title of the document or information; (2) the date of the document or information; (3) the name and title of the author of the document or information; (4) the name and title of each addressee and recipient; (5) a general description of the contents of the document or information; and (6) the privilege being asserted by Kimberly-Clark.

42. No claim of confidentiality shall be made with respect to any data, including but not limited to, all sampling, analytical monitoring, or laboratory or interpretive reports.

43. Kimberly-Clark shall preserve for the duration of these Orders and for a minimum of ten (10) years after its termination, all documents and other information within its possession or control, or within the possession or control of its contractors or agents, which in any way relate to the Work, notwithstanding any document retention policy to the contrary. Kimberly-Clark may preserve such documents by microfiche, or other electronic or photographic device. At the conclusion of this document retention period, Kimberly-Clark shall notify Ohio EPA at least sixty (60) days prior to the destruction of these documents or other information; and upon request, shall deliver such documents and other

information to Ohio EPA.

#### **XIV. OTHER CLAIMS**

44. Nothing in these Orders shall constitute or be construed as a release from any claim, cause of action, or demand in law or equity against any person, firm, partnership, or corporation, not subject to these Orders for any liability arising from, or related to, events or conditions at the Site.

#### **XV. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION**

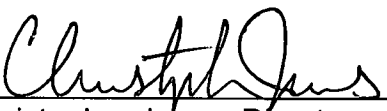
45. The effective date of these Orders shall be the date on which these Orders are entered in the Journal of the Director of Ohio EPA.

46. These Orders may be modified by Ohio EPA. Modifications shall be in writing and shall be effective on the date entered in the Journal of the Director of Ohio EPA.

#### **XVI. TERMINATION**

47. These Orders shall terminate upon Ohio EPA's approval in writing of Kimberly-Clark's written certification to Ohio EPA that all Work required to be performed under these Orders has been completed. The termination of these Orders shall not affect the terms and conditions of Section XII, Reservation of Rights, Section XIII, Access to Information, and Section XIV, Other Claims.

**IT IS SO ORDERED:**

  
\_\_\_\_\_  
Christopher Jones, Director  
Ohio Environmental Protection Agency

3-12-01  
\_\_\_\_\_  
Date

**SITE CLOSURE REPORT  
FORMER BROWN-BRIDGE FACILITY  
TROY, OHIO**

**February 2001**

**RECEIVED  
OHIO EPA**

**FEB 15 2001**

**SOUTHWEST DISTRICT**

**PREPARED FOR:**

**KIMBERLY-CLARK CORPORATION  
ROSWELL, GEORGIA**

**PREPARED BY:**

**Steve McFadden**

## TABLE OF CONTENTS

Section	Page
LIST OF FIGURES	
LIST OF TABLES	
I. INTRODUCTION AND SITE HISTORY .....	1
II. SUMMARY OF SECOND HALF 2000 ACTIVITIES .....	5
A. Groundwater Sampling.....	5
B. System Operation.....	5
III. EVALUATION OF REMEDIATION RESULTS.....	7
A. East End Groundwater Remediation.....	7
B. West End Groundwater Remediation .....	7
1. Qualitative Evaluation .....	8
2. Statistical Evaluation .....	10
IV. CONCLUSIONS .....	12
V. REFERENCES .....	13

## APPENDICES

- A. Figures
- B. Tables
- C. Laboratory Reports – September & December 2000

## LIST OF FIGURES

<u>Figure No.</u>	<u>Title</u>	<u>Appendix A</u>
1	Toluene in EEIB-8	
2	Toluene in EEIB-9	
3	Tetrachloroethene in KMW-1	
4	Tetrachloroethene in GZA-2	
5	Toluene in EEIB-2	
6	Tetrachloroethene in EEIB-4	
7	Tetrachloroethene in GZA-1	
8	Tetrachloroethene in KMW-7	
9	Trichloroethene in KMW-7	

## LIST OF TABLES

<u>Table No.</u>	<u>Title</u>	<u>Appendix B</u>
1	Groundwater Analytical Data Summary	
2	Summary Comparison to Clean-up Goals, Year 1997, East End Groundwater Remediation System	
3	Summary Comparison to Clean-up Goals, Year 2000, West End Groundwater Remediation System	
4	PCE, TCE and Vinyl Chloride in Groundwater Samples	



## **I. INTRODUCTION AND SITE HISTORY**

The former Brown-Bridge facility (now Spinnaker Coating) manufactures pressure-, moisture- and heat-sensitive adhesive stock for labels, stamps and related items. The facilities consist of plants at two sites in Troy, Ohio. Plant 1, located at 518 East Water Street, is the original site at which Brown-Bridge began operations in 1928. Plant 1 expanded over the years to include five connected buildings on an approximately 5-acre property parallel to the Great Miami River.

Kimberly-Clark Corporation owned and operated the facility from 1971 until 1994 when the property was sold. Environmental assessments were conducted as part of the property sale. The property assessments included test drilling, monitoring well installation, soil and groundwater sampling and analyses. Impacted soil and groundwater were first discovered in October 1993 as part of these assessments. A second phase of testing in October and November 1993 delineated the extent of impact to soil and groundwater on the Brown-Bridge property (Applied Engineering & Science (AES), November 1993). Additional investigations were completed in July 1994 that confirmed the extent of soil and groundwater impact on the Brown-Bridge property and included off-site sampling between the facility and the Great Miami River (AES, August 1994).

The investigations focused on known areas of environmental concern including hazardous and nonhazardous materials storage and handling locations. These areas were:

- Bulk Storage Area – located in the west parking lot, this area contained aboveground tanks for the storage of fuel oil, virgin and reclaimed toluene and methanol.
- Hazardous Waste Storage Area – located next to the Bulk Storage area, this area was used for temporary storage of drums of spent solvents and other hazardous materials until they were removed from the property.
- Former Gasoline UST (400 gallons) – formerly located on the east side of the Bulk Storage area, removed in 1988.

- Former Fuel Oil UST (3,000 gallons) – formerly located in the east shipping dock, removed in 1986.
- Closed Fuel Oil UST (15,000 gallons) – located under building 2, closed in place (filled with concrete) in 1988.
- Toluene Recovery System – located on the east side of the Brown-Bridge building in the east parking lot, used to reclaim toluene from the paper finishing operation.
- Former Toluene In-Ground Tank (3,000 gallons) – located on the east side of the facility and used as part of the toluene recovery system, removed in 1988 along with surrounding soil impacted by a toluene release.
- Nonhazardous Waste Storage Area – located adjacent to the west end of the Brown-Bridge Building in the west parking lot, used for storage of empty drums and drums of nonhazardous adhesive materials.
- Spill Tank – located inside the east parking lot gate, used for containment of spills from the east loading dock.
- Bulk Unloading Area – located behind (north) the Brown-Bridge building, approximately half way between the two ends, at the end of a former rail spur where bulk materials were unloaded.
- In-Ground Wastewater Aeration Tanks – located on the east side of the Brown-Bridge property, used for pre-treatment of wastewater prior to discharge to the City of Troy POTW.

Results of these investigations indicated the following four areas where releases had impacted soil and groundwater quality:

- In and downgradient of the Bulk Storage area (West End), soil and groundwater were impacted by releases of fuel oil and toluene.
- In and downgradient of the Nonhazardous Waste Storage area (West End), soil and groundwater were impacted by a release of volatile organic compounds (VOCs).
- In and downgradient of the former in-ground toluene tank (East End), groundwater was impacted by a release of toluene.

- On the north side of the in-ground aeration tank (East End), groundwater was impacted by a release of toluene.

The Ohio Environmental Protection Agency (OEPA) was notified of the releases. After a series of correspondence and meetings, OEPA concurred that Kimberly-Clark should proceed with a voluntary remediation of the site. Soil and groundwater remediation began in April 1995 (AES, November 1995). Tanks in the Bulk Storage area were removed and a new bulk storage facility was constructed on the east side of the Brown-Bridge property. Impacted soil in the Bulk Storage and Nonhazardous Waste Storage areas was excavated, removed and replaced with clean fill. Two separate groundwater remediation systems were installed, one system for remediation of the two groundwater contaminant plumes present on the west side of the facility and one system for remediation of the two groundwater contaminant plumes on the east side of the facility. The two systems were constructed in the summer of 1995 and began operation in August 1995.

The groundwater treatment system on the East End of Brown-Bridge was an air sparging/vapor extraction system consisting of four air injection wells and five vapor extraction wells. Toluene is the only targeted groundwater constituent in the two contaminant plumes. Air is injected below the water table using an oilless compressor and removed above the water table with a vacuum pump. Vapor is discharged directly to the atmosphere.

Quarterly sampling and analysis of groundwater monitoring wells indicated that clean-up goals were reached in February 1997. As a result, air sparging was stopped in March 1997. Vapor extraction continued until January 1998 while quarterly sampling and analyses continued to confirm results. Groundwater remediation on the East End of Brown-Bridge is now complete.

The groundwater treatment system on the West End of Brown-Bridge is a pump-and-treat system that includes four pumping wells to extract impacted groundwater, a separator tank to remove recovered fuel oil, an air stripper to remove VOCs and discharge of the treated water. Several operational changes have been made since system start-up in August 1995. Initially, exhaust from the air stripper was filtered through carbon canisters prior to discharge to the

atmosphere. Sampling conducted during the first four months of operation indicated that the canisters were not necessary to meet air permit limitations. The carbon canisters were removed in December 1995.

The width of the plumes decreased as remediation progressed. As a result, the pumping well located farthest west was no longer needed and was replaced as an extraction point by a well closer to the center of the contaminant plume in September 1996. Minimal amounts of fuel oil were recovered in the early months of system operation and it became apparent that most of the fuel oil was removed during excavation. Therefore, the separator tank was taken off line in June 1997. Groundwater from the pumping wells now goes directly to the air stripper for treatment. Treated water discharge was originally to the City of Troy POTW. In 1997, Kimberly-Clark applied for and received an NPDES discharge permit from OEPA. Discharge of treated groundwater has been to the Great Miami River since June 1997.

Quarterly sampling and analysis of downgradient monitoring wells indicates that remediation efforts have greatly reduced constituent concentrations. Analytical results from the most recent four quarters (March, June, September and December 2000) were below groundwater clean-up goals or background concentrations for all constituents. Groundwater remediation on the West End of Brown-Bridge is now also complete.

Kimberly-Clark has been providing OEPA with copies of all analytical data and updates on the progress of the remediation on a regular basis. The most recent of these was in August of 2000 (HydroVision, August 4, 2000). The purpose of this report is to provide an update of site remediation activities during the second half of 2000 and to document completion of the groundwater remediation activities at the former Brown-Bridge facility.

## **II. SUMMARY OF SECOND HALF 2000 ACTIVITIES**

Groundwater remediation continued on the West End of the facility throughout the second half of 2000. Groundwater samples were collected and analyzed in September and December. The groundwater extraction and treatment system operated continuously, except for brief periods of routine maintenance, extracting, treating and discharging water to the Great Miami River in compliance with the NPDES permit.

### **A. Groundwater Monitoring Results**

Quarterly groundwater sampling of monitoring wells continued through the second half of 2000. Downgradient wells, including both monitoring and extraction wells, were sampled in September 2000. All West End monitoring, including the wells listed above and background monitoring wells EEIB-4, GZA-1 and KMW-5 were sampled in December 2000. Volatile organic constituents present in groundwater continue to be consistent with the analytical history of the site; however, concentrations are below either clean-up goals established for the facility or background concentrations. A summary table of groundwater analytical data for the site from October 1993 through December 2000 is included as Table 1, Appendix B. Laboratory analytical reports for the September and December 2000 groundwater sampling events at the facility are included in Appendix C.

### **B. Groundwater Treatment System Operation**

The groundwater treatment system operated normally throughout the second half of 2000 and through January 2001. From July 2000 through January 2001, 4.82 million gallons of water were extracted and treated. Operation was continuous with the exception of periodic maintenance and repairs during which the system was shut down for short periods. Treated groundwater is discharged to the Great Miami River. All discharge parameters were in

compliance with the NPDES permit (# 11N00260) for the July 2000 through January 2001 period.

### **III. EVALUATION OF REMEDIATION RESULTS**

#### **A. East End Groundwater Remediation**

As previously stated, the East End groundwater remediation system targeted two small areas of impacted by toluene. Toluene is the only constituent known to have been released on the East End as a result of past facility operations. Other constituents, specifically chlorinated VOCs, are known to be in groundwater as it enters the East End of the facility property from up gradient. An air sparging/SVE system was in operation from August 1995 to January 1998.

Groundwater clean-up goals were established for the site prior to the start of remediation. (AES, November 1995, Table 4). Table 2, Appendix B, summarizes the four quarters of groundwater analytical results in calendar year 1997. Toluene concentrations have been reduced to below laboratory detection limits in samples from all East End monitoring wells for the four quarterly sampling events in 1997. Figures 1 and 2, Appendix A, illustrate graphically the reduction in toluene concentrations during the course of the remediation for wells in the former aeration tank plume (EEIB-8, Figure 1) and former in-ground tank plume (EEIB-9, Figure 2). All chlorinated VOCs were also below clean-up goals with the exception of tetrachloroethene (PCE). However, the highest concentrations of this constituent were detected in samples from KMW-1 and GZA-2, both upgradient wells (see Figures 3 and 4, Appendix A). It is apparent that PCE enters the facility property with groundwater flow from an off-site source. The remediation system was shut down in January 1998 because remediation goals have been met and remediation is complete.

#### **B. West End Groundwater Remediation**

Groundwater on the West End of the facility was impacted by releases of toluene and fuel oil from the Bulk Storage area and by chlorinated VOCs in the vicinity of the Nonhazardous Storage area. Toluene and fuel oil were stored in the Bulk Storage area. The conclusion of a release of chlorinated VOCs on the property, however, was based on higher than background concentrations downgradient of the Nonhazardous Storage prior to remediation. Fuel oil

constituents were apparently remediated during removal of impacted soil in April 1995. Only very low concentrations of fuel oil constituents were detected after the soil removal and indicators of fuel oil were dropped from groundwater analyses after 1996 (note, however, that polynuclear aromatic hydrocarbon (PAH) analyses are still required for the NPDES permit, although there has been only one minor detection in the treatment system influent since discharge to the Great Miami River began in June 1997).

#### 1. Qualitative Evaluation -

Table 3, Appendix B, summarizes the four quarters of groundwater analytical results in calendar year 2000. Toluene concentrations were below laboratory detection limits in samples from all East End monitoring wells for the four quarterly sampling events in 1997. Figure 5, Appendix A, illustrates graphically the effect of remediation on toluene in a well located downgradient of the toluene tank in the former Bulk Storage area. Concentrations of other aromatic hydrocarbons (benzene, ethylbenzene and xylenes) and most chlorinated VOCs have also been reduced to below clean-up standards for the last four consecutive quarters or longer.

However, some chlorinated VOCs, most notably PCE, continue to migrate onto the facility property. PCE, trichloroethene (TCE) and vinyl chloride continue to be present in groundwater samples from both upgradient and downgradient wells in concentrations exceeding clean-up goals. Figures 6 and 7, Appendix A, illustrate PCE concentrations in two monitoring wells (EEIB-4 and GZA-1, respectively) located near Water Street, the upgradient property boundary. Samples from these two wells have contained concentrations of PCE exceeding the clean-up goal for the entire period of record. Figures 8 and 9, Appendix A, graphically illustrate the concentrations of PCE and TCE in samples from KMW-7 over time. Potentiometric maps of the West End area (see AES, March 1998, Figures 11 through 14) indicate that KMW-7, although located north of the former Bulk Storage area, is upgradient of the areas impacted by releases from this facility. There is only a small section of the west parking lot between KMW-7 and the upgradient property boundary with Hobart Cabinet. PCE in KMW-7 groundwater samples (Figure 8) illustrates a textbook example of a slug of PCE moving with groundwater flow across the facility property. The concentrations of TCE versus



time mirror PCE concentrations (compare Figures 8 and 9), indicating that TCE is linked to the breakdown of PCE.

Table 4, Appendix B, lists the range of concentrations of PCE, TCE and vinyl chloride in each of the West End wells. Comparing concentrations of PCE, TCE and vinyl chloride in groundwater samples from upgradient (background) and downgradient wells, the following observations are made:

- PCE is present in highest concentrations in samples from upgradient wells representing background conditions.
- PCE concentrations decrease with migration across the facility property to the location of downgradient wells.
- Concentrations of TCE and vinyl chloride increase between the locations of upgradient and downgradient wells on the facility property.
- Downgradient concentrations, both actual and mean, of TCE and vinyl chloride are approximately one order of magnitude below PCE concentrations entering the facility property at upgradient wells.
- TCE and vinyl chloride are both breakdown products of PCE.

It is apparent that PCE is migrating onto the facility property from an upgradient source. Once on the facility property, PCE is breaking down to TCE and vinyl chloride. Geochemical conditions on the facility property favor breakdown of PCE, as evidenced by the relative abundance of chemicals in the breakdown sequence of PCE (TCE, 1,2-dichloroethene, vinyl chloride) and the relative scarcity of PCE in samples from downgradient wells. It is probable that geochemical conditions in the shallow groundwater flow regime change on the property as the northern edge of the property borders the discharge zone of the Great Miami River.

## 2. Statistical Evaluation –

The U.S. Environmental Protection Agency (EPA) has issued guidance for the evaluation of groundwater analytical data at RCRA facilities (EPA, 1989, 1992a and 1992b). Specifically,

the EPA recommends that when comparisons to fixed compliance standards are made, such as the maximum contaminant levels (MCLs) on which the groundwater clean-up goals for the former Brown-Bridge facility are based, that the data be evaluated with respect to confidence intervals of the mean concentration. If the standard, in this case the established clean-up goal, falls within the confidence interval of the mean of the concentrations for each well, or the confidence interval is entirely below the standard, then there is no statistically significant evidence that the mean concentration exceeds the standard.

The groundwater analytical data were statistically evaluated with respect to the clean-up goals as follows:

1. Upgradient wells (EEIB-4, GZA-1, KMW-5 and KMW-7) were not evaluated with respect to clean-up goals. Water quality in these wells represents background conditions as groundwater enters the facility property and evaluation to clean-up goals is, therefore, not applicable.
2. Of the downgradient wells, several have not had any detections of PCE, TCE or vinyl chloride in over one year (i.e., higher concentrations were present prior to or in the early stages of remediation). Some wells, in fact, have only had a single detection of one or more of the above three constituents several years ago. Constituent concentrations in these wells were also not evaluated because these wells are assumed to be in compliance with the clean-up goals following remediation efforts (see Tables 1 and 4, Appendix B).
3. After considering items 1 and 2, TCE in KMW-9 and PW-3, and vinyl chloride in PW-3, were evaluated.
4. The mean and standard deviation of the log-transformed data were calculated. Normality of the data were evaluated using the Shapiro-Wilk test. Non-detects were handled in the following way:
  - a. less than 15% nondetects: one-half of the laboratory detection limit was substituted as the value of the concentration (TCE in PW-3).
  - b. 15-50% nondetects: the mean and standard deviation were corrected using Aitchison's adjustment (TCE in KMW-8 and vinyl chloride in PW-3).
5. The confidence interval was calculated and compared with the log of the clean-up goals for TCE and vinyl chloride.

Table 4, Appendix B, lists the mean, standard deviation and confidence interval for TCE and vinyl chloride in wells KMW-8 and PW-3. The log of the clean-up goal is within the confidence interval in each case, indicating that there is no statistically significant evidence that downgradient concentrations of TCE and vinyl chloride exceed the clean-up goals in downgradient locations.

#### IV. CONCLUSIONS

Groundwater remediation on the East End of the facility property was completed in January 1998 after four consecutive quarters of groundwater samples with toluene concentrations below the clean-up goals. PCE continues to migrate onto the East End from an upgradient, off-site source. The East End groundwater remediation system has not been in operation since January 1998.

Groundwater remediation on the West End of the facility property has reduced concentrations of aromatic hydrocarbons and most chlorinated VOCs to below clean-up goals for the past four consecutive quarters (year 2000). PCE is migrating onto the facility property from an off-site source. Once on the property, PCE breaks down to its daughter products TCE and vinyl chloride. Concentrations of these three constituents in groundwater beneath the former Brown-Bridge property result from the impact of background conditions and are irreducible by any remediation efforts conducted on the facility property. Furthermore, there is no statistically significant evidence that downgradient concentrations of any of these three constituents exceed the clean-up goals.

Groundwater remediation at the West End of the facility is complete. It is recommended that operation of the West End treatment system be discontinued. In addition all East and West End wells should be plugged and abandoned to eliminate the potential for the wells to become future pathways that promote the migration of surface contaminants to groundwater.

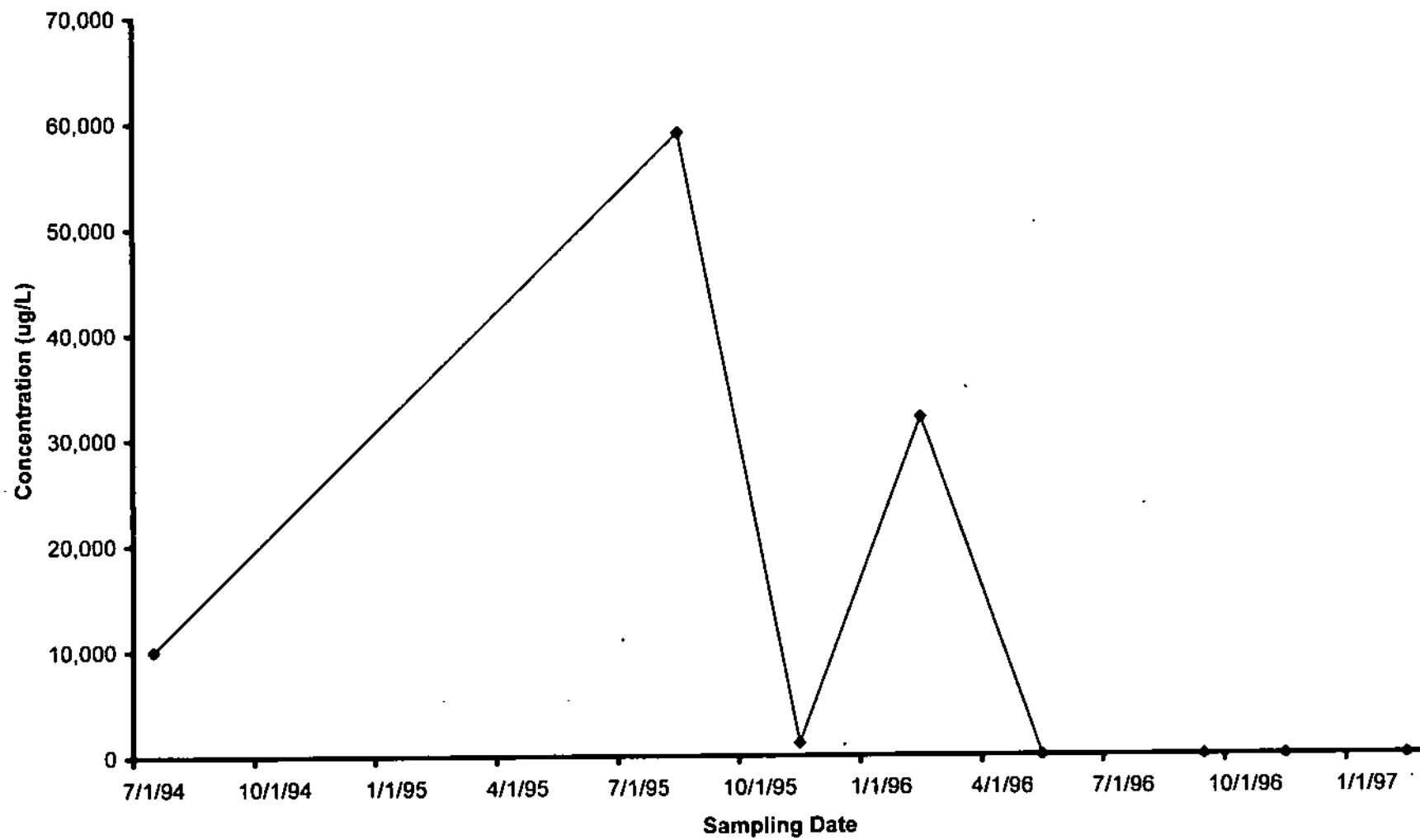
## V. REFERENCES

- Applied Engineering & Science, March 1998, *Response to Ohio EPA*, prepared for Kimberly-Clark Corporation.
- Applied Engineering & Science, November 1995, *Site Remediation Report, Brown-Bridge Plant 1, Troy, Ohio*, prepared for Kimberly-Clark Corporation.
- Applied Engineering & Science, August 1994, *Current Site Conditions and Remediation Options, Brown-Bridge Plant 1, Troy, Ohio*, prepared for Kimberly-Clark Corporation.
- Applied Engineering & Science, November 1993, *Site Investigations and Remediation Recommendations, Brown-Bridge Facility, Troy, Ohio*, prepared for Kimberly-Clark Corporation.
- HydroVision, August 4, 2000, letter to L. Marshall, OEPA, from S. McFadden, HydroVision, Inc. summarizing first half 2000 groundwater remediation activities.
- U. S. Environmental Protection Agency, 1992a, *Statistical Training Course for Ground-Water Monitoring Data Analysis*, US EPA Office of Solid Waste, 1992, EPA/530-R93-003.
- U. S. Environmental Protection Agency, 1992b, *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities*, Addendum to Interim Final Guidance, US EPA Office of Solid Waste, July 1992 (Draft in *Statistical Training Course for Ground-Water Monitoring Data Analysis*).
- U. S. Environmental Protection Agency, 1989, *Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities*, Interim Final Guidance, US EPA Office of Solid Waste, April 1989, EPA/530-SW89-026.

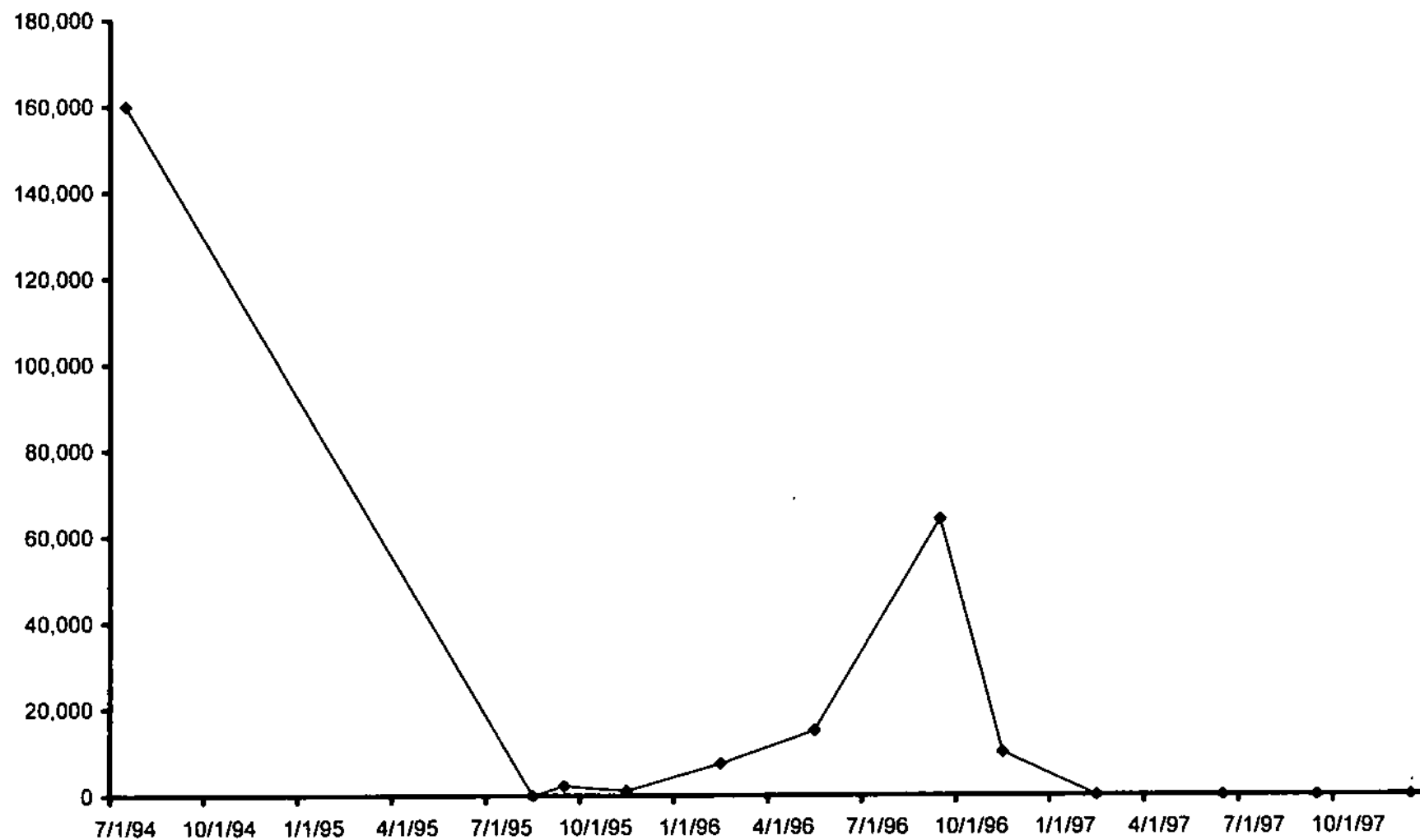
## **APPENDIX A**

### **FIGURES**

**FIGURE 1**  
**TOLUENE IN EEIB-8**

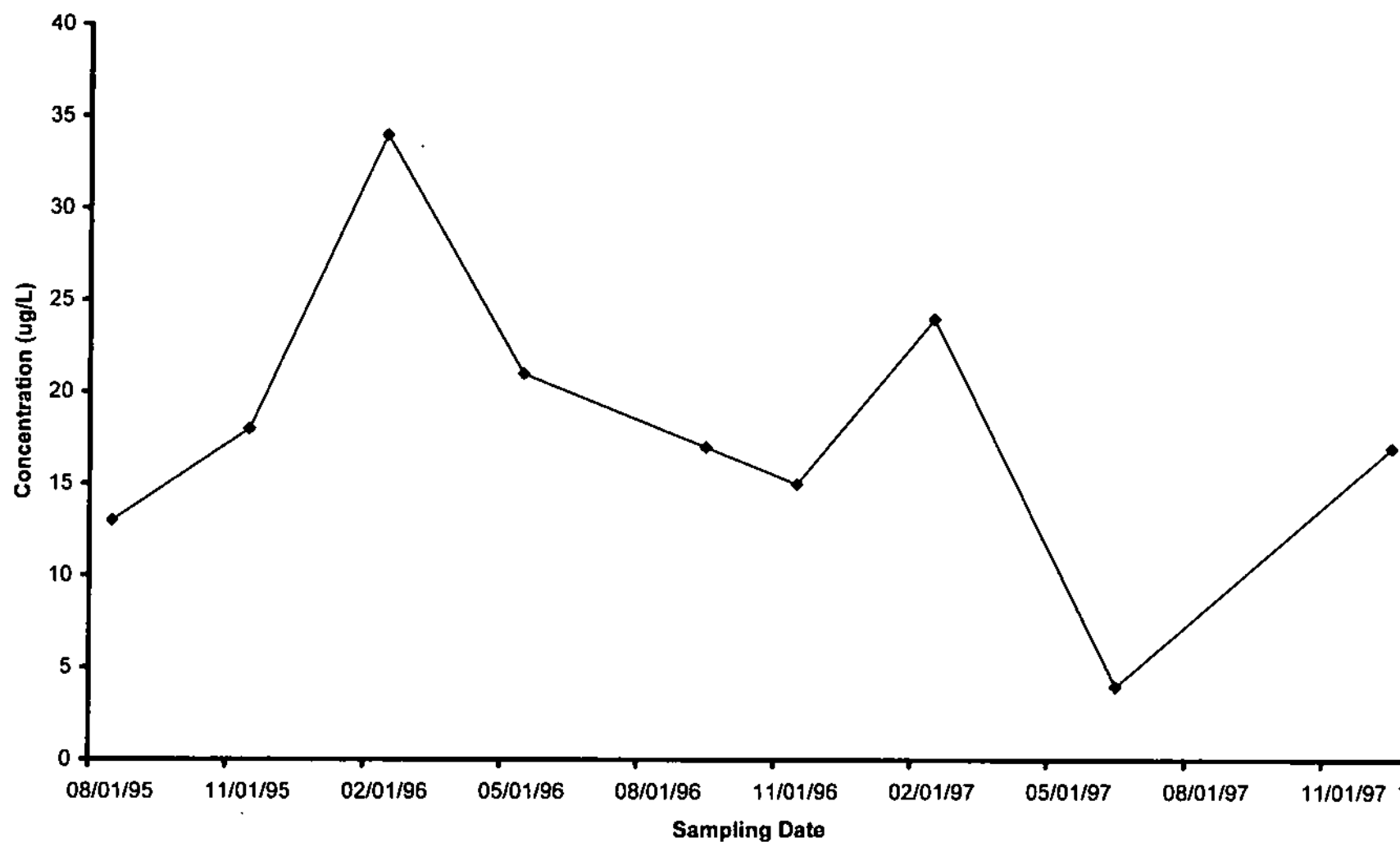


**FIGURE 2.**  
**TOLUENE IN EEIB-9**

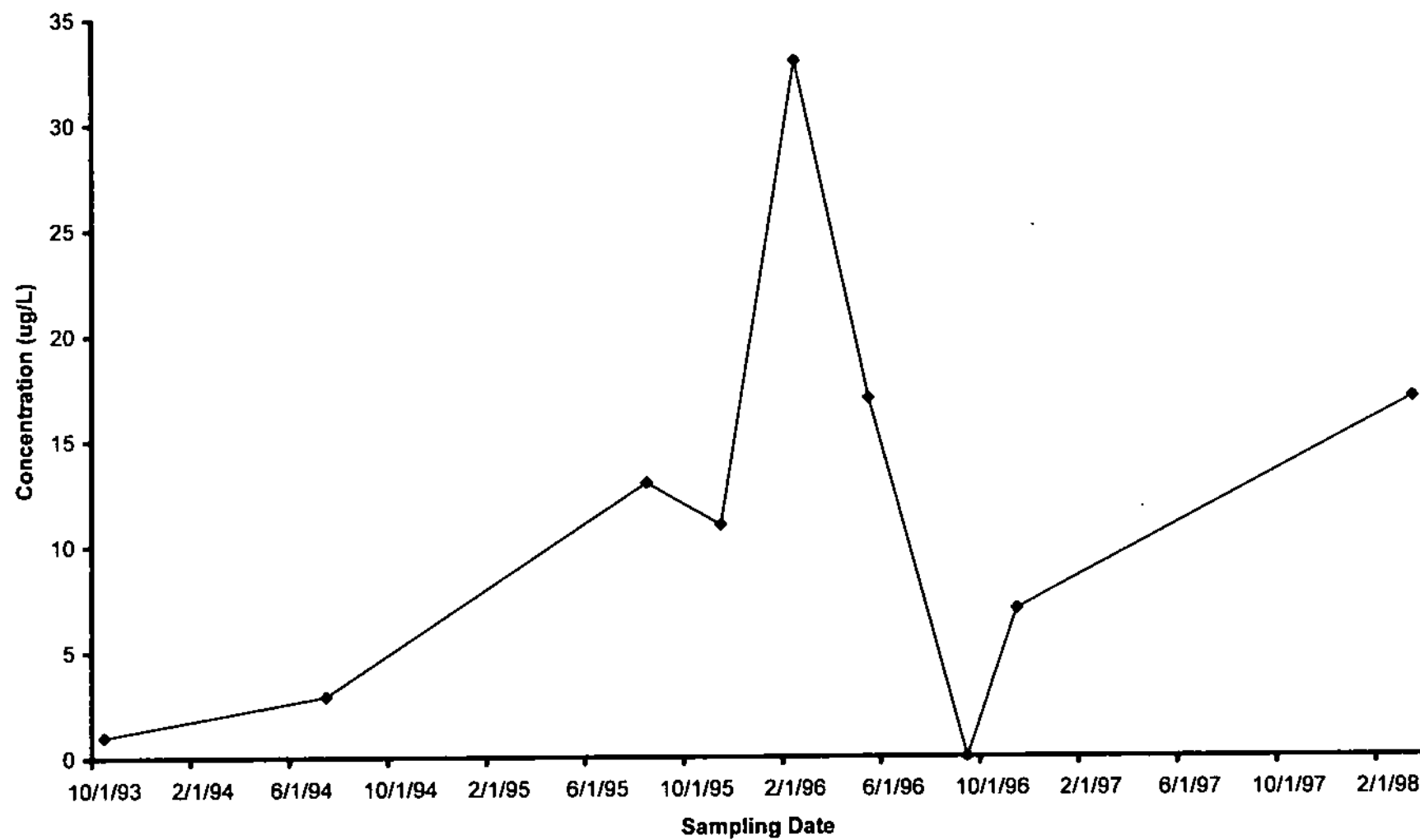




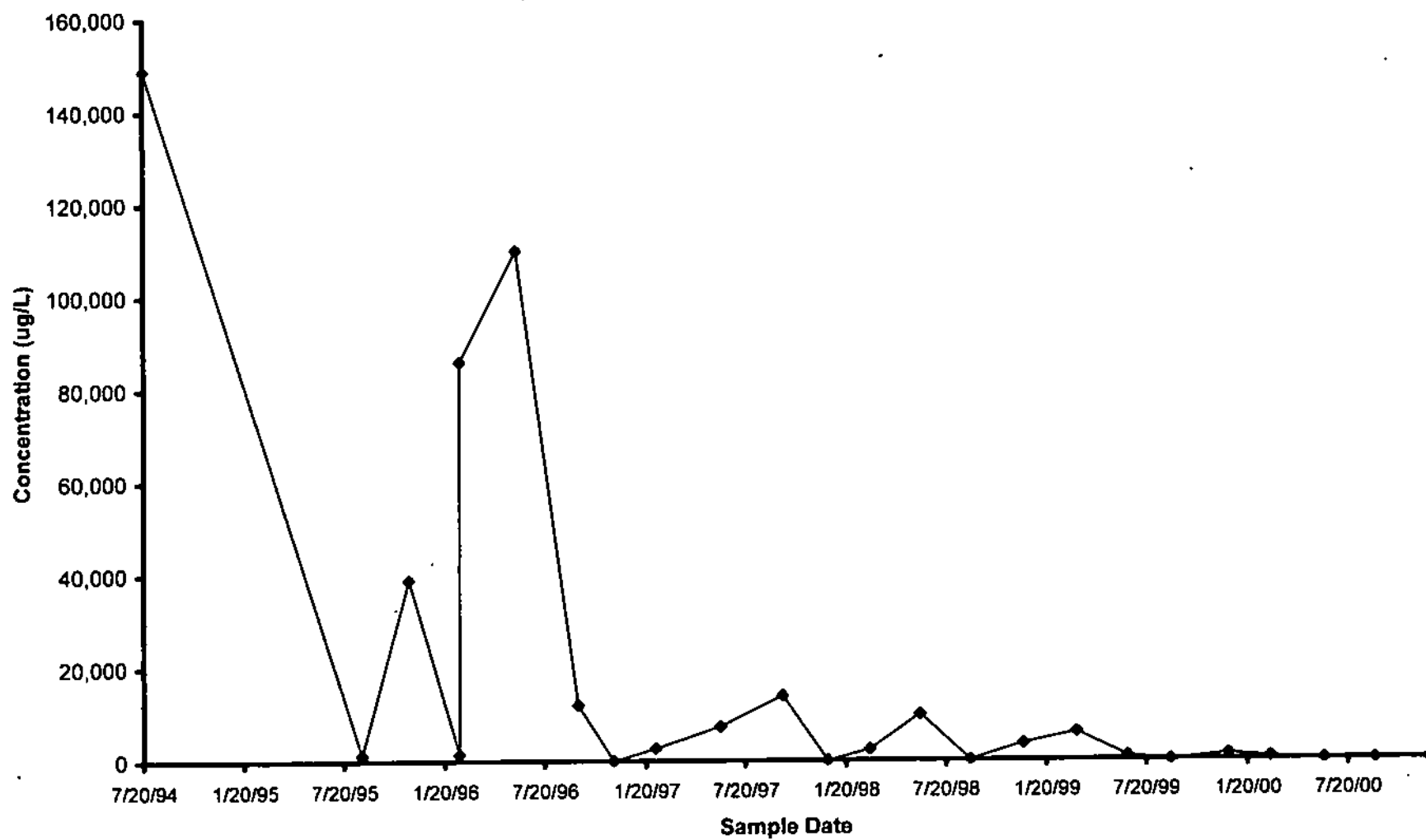
**FIGURE 3**  
**TETRACHLOROETHENE IN KMW-1**



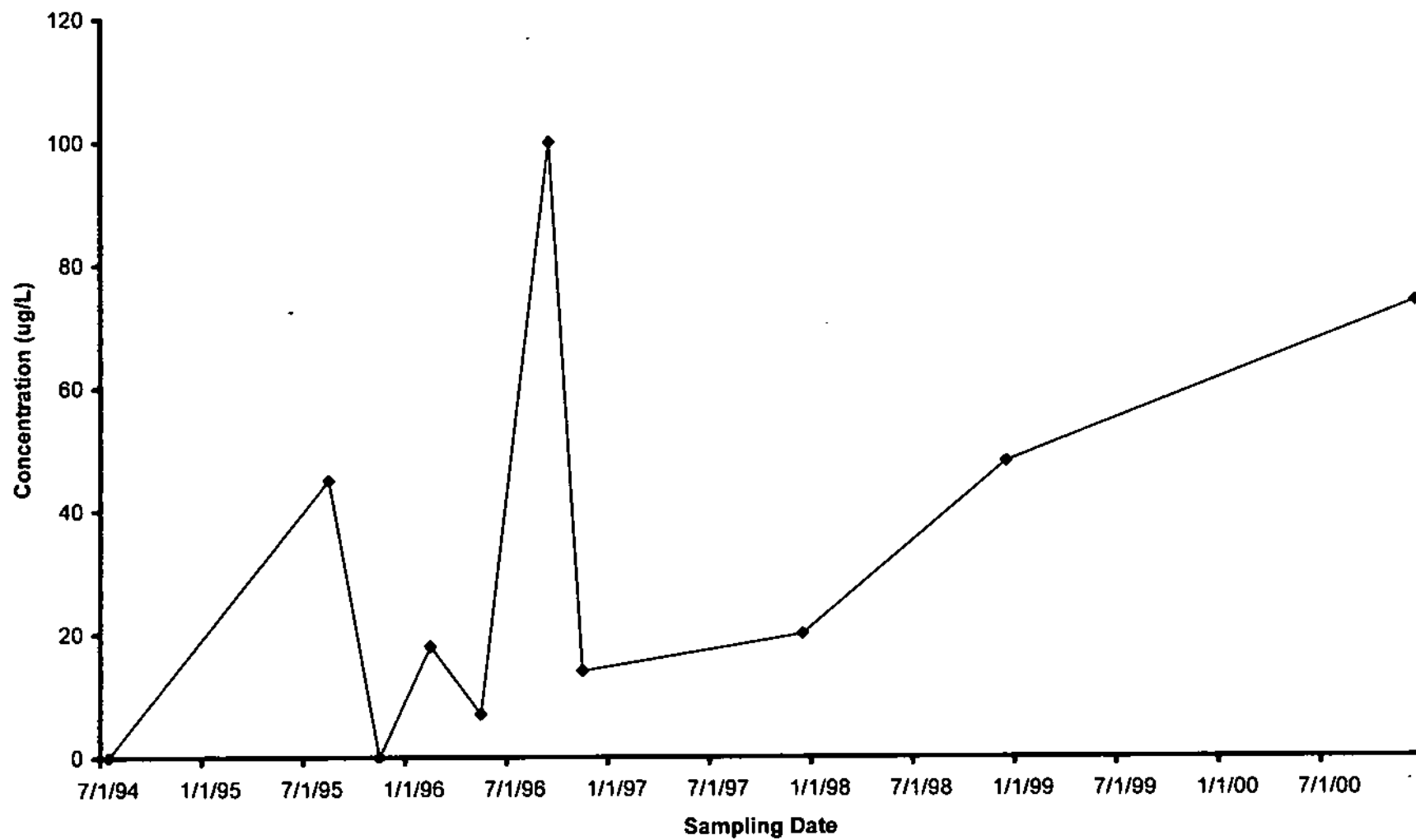
**FIGURE 4**  
**TETRACHLOROETHENE IN GZA-2**



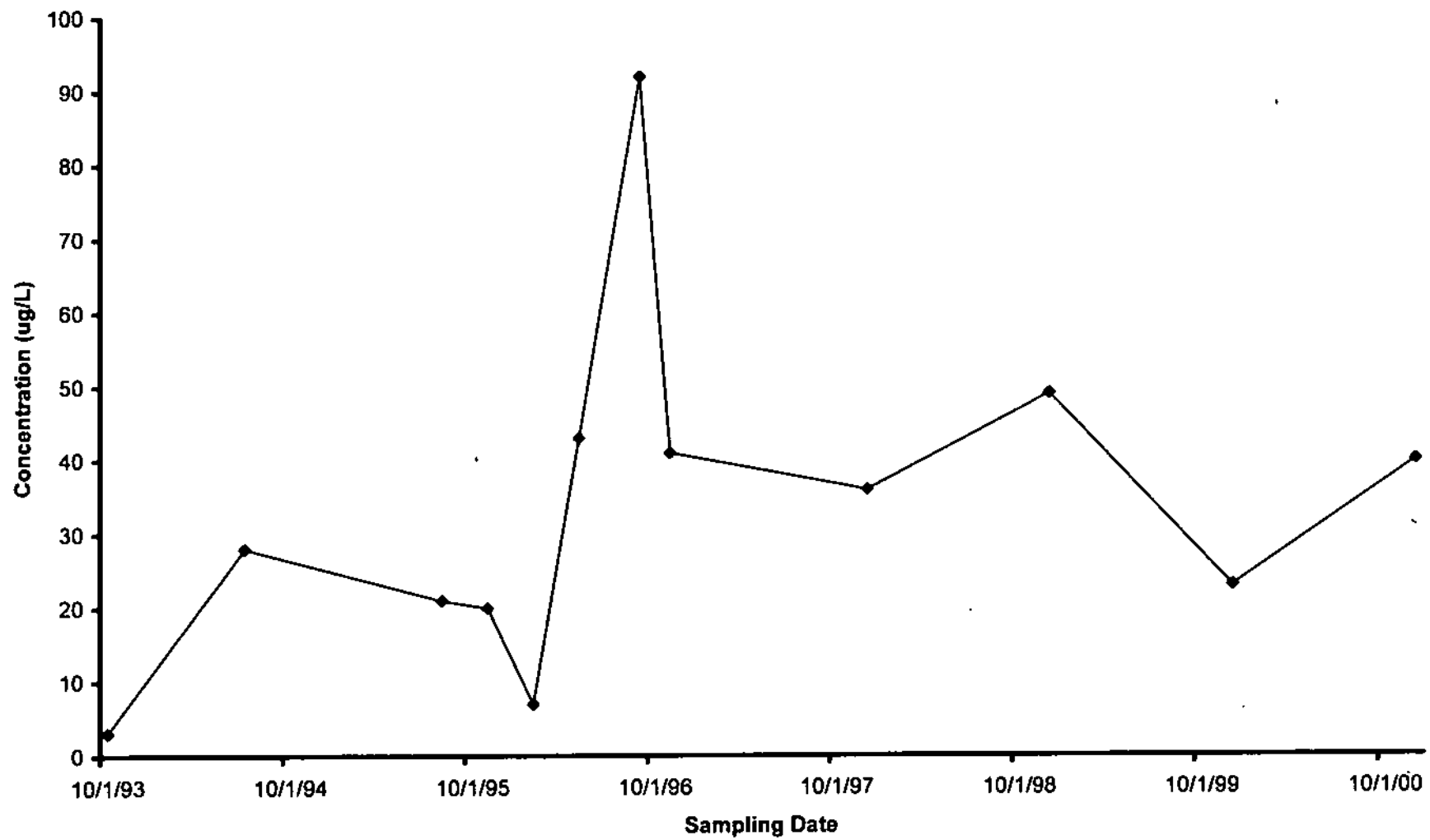
**FIGURE 5**  
**TOLUENE IN EEIB-2**



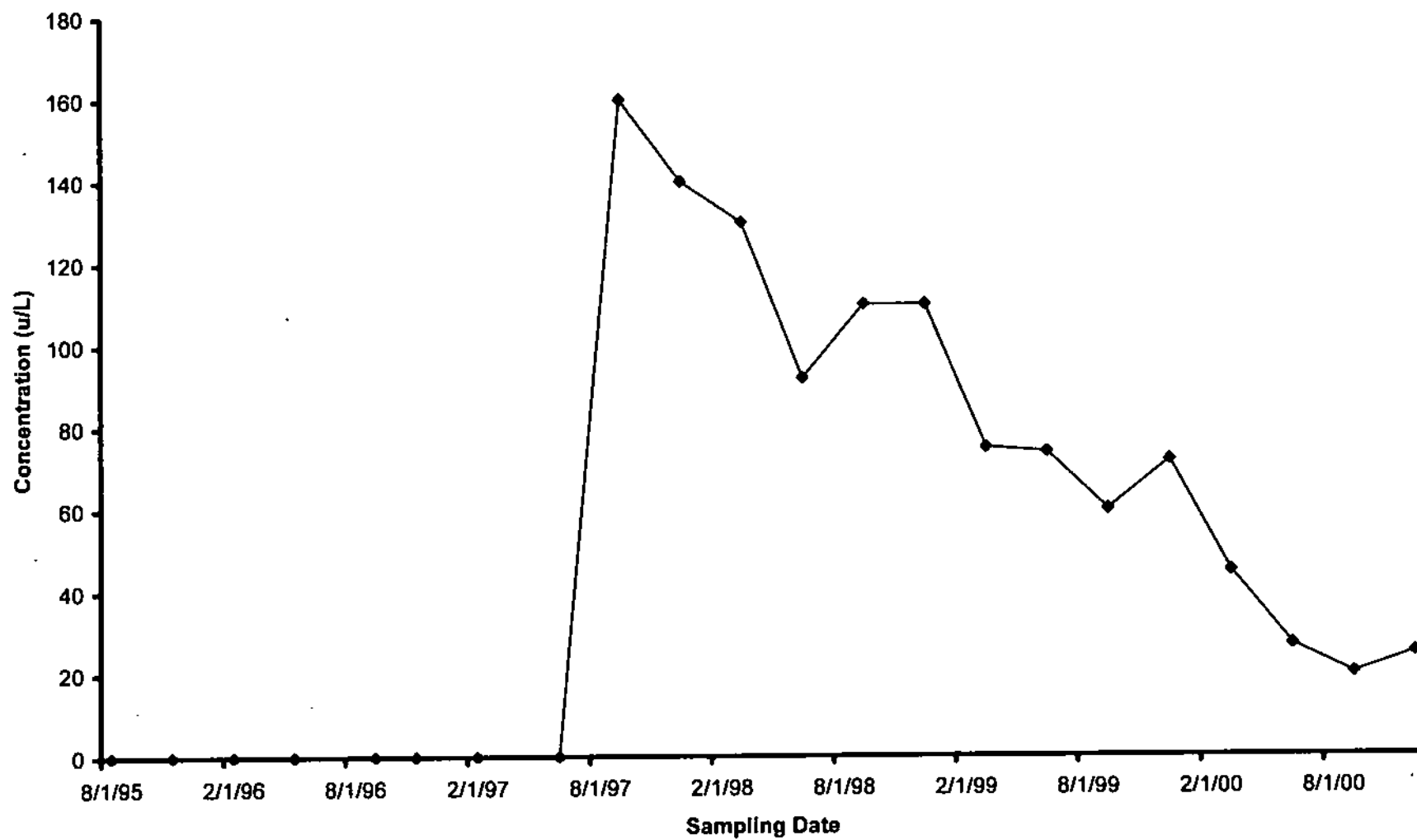
**FIGURE 6**  
**TETRACHLOROETHENE IN EEIB-4**



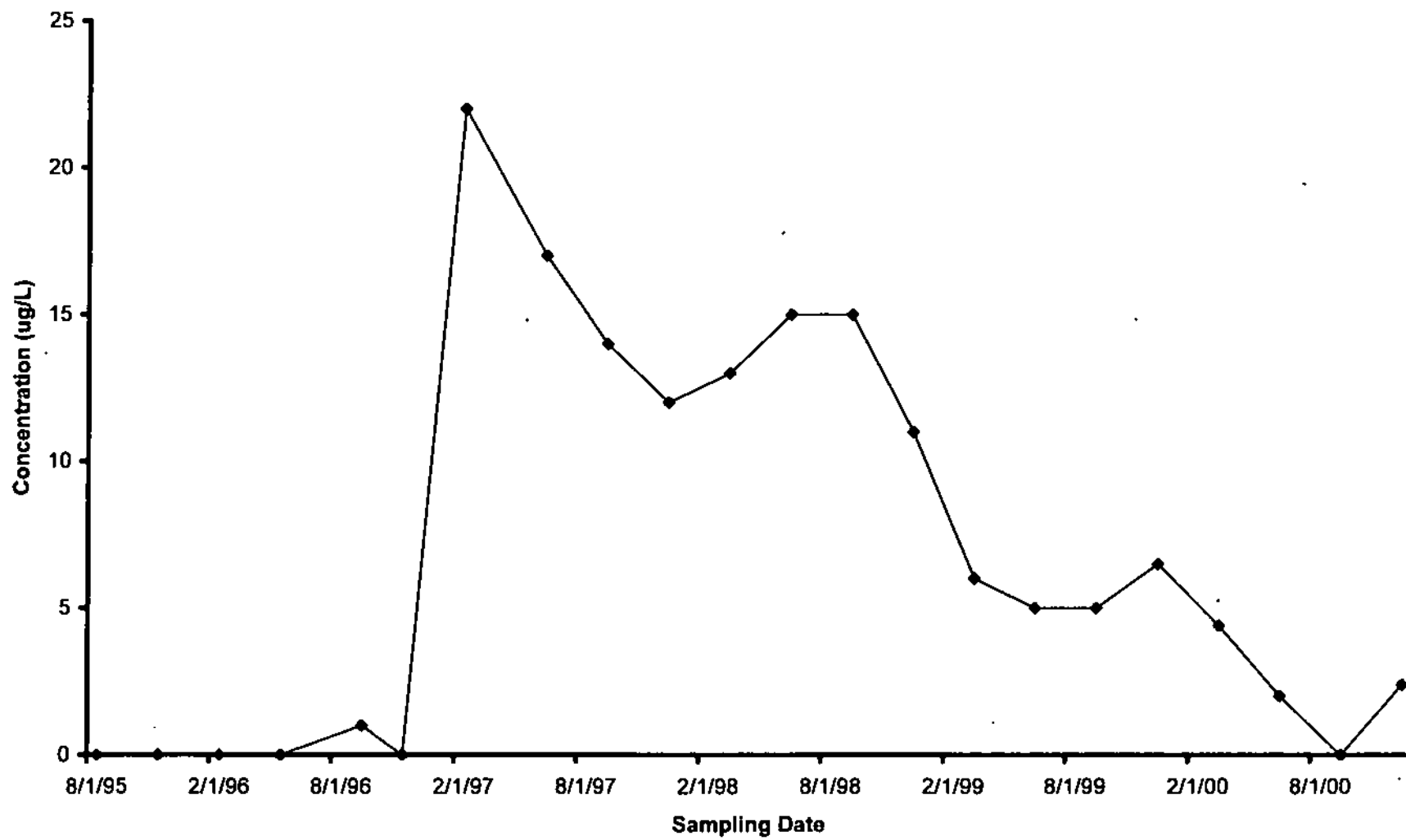
**FIGURE 7**  
**TETRACHLOROETHENE IN GZA-1**



**FIGURE 8**  
**TETRACHLOROETHENE IN KMW-7**



**FIGURE 9**  
**TRICHLOROETHENE IN KMW-7**



## **APPENDIX B**

### **TABLES**



KIMBERLY-CLARK CORPORATION  
BROWN BRIDGE FACILITY  
TROY, OHIO  
GROUNDWATER SAMPLING ANALYSIS RESULTS

TABLE 1

KMW 1	TOC ELEV: 825.53	So Cond:	1,1-Di	Chl 1,2	Tetra	1,1,1 Tri-	Trl	Chloro	Vinyl	Trl	Ethyl	Xylenes	Total
Date	W.L.	pH Units	mmhos	Chloro	Chloro	Chloro	Chloro	Chloro	Chloride	Chloro	Benzene	Benzene	Petroleum
				ethane	ethane	ethane	ethane	ethane					Hydrocarbons
08/23/95	812.87	6.5	0.87	n	nr	13	n	n	n	n	n	n	nr
11/14/95	812.74	6.5	0.65	n	nr	18	n	n	n	n	n	n	nr
02/16/96	812.41	6.5	1.17	n	nr	34	n	n	n	n	n	n	nr
05/29/96	814.49	5.5	0.56	n	nr	21	n	n	n	n	n	n	nr
09/18/96	810.36	6.5	0.46	n	nr	17	n	n	n	n	n	n	nr
11/22/96	807.61	5.5	1.11	n	nr	19	n	n	n	n	n	n	nr
02/07/97	nr	nr	nr	n	nr	24	n	n	n	n	n	n	nr
06/04/97	814.93	6.68	0.635	n	nr	4	n	n	n	n	n	n	nr
12/16/97	808.97	6.69	0.971	n	n	17	n	n	n	n	n	n	nr
KMW 2	TOC ELEV: 826.19	So Cond:	1,1-Di	Chl 1,2	Tetra	1,1,1 Tri-	Trl	Chloro	Vinyl	Benzene	Toluene	Ethyl	Total
Date	W.L.	pH Units	mmhos	Chloro	Chloro	Chloro	Chloro	Chloro	Chloride			Benzene	Petroleum
				ethane	ethane	ethane	ethane	ethane					Hydrocarbons
08/23/95	811.94	7.0	1.07	1	nr	n	n	n	n	n	n	n	nr
11/14/95	812.75	6.5	0.94	n	nr	n	n	n	n	n	n	n	nr
02/16/96	811.63	6.5	0.98	n	nr	n	n	n	n	n	n	n	nr
05/29/96	814.33	5.5	0.68	n	nr	n	n	n	n	n	7,100	n	nr
09/18/96	810.34	7.0	0.89	1	nr	n	n	2	n	n	n	n	nr
11/22/96	807.49	6.5	0.94	n	nr	n	n	n	n	n	n	n	nr
02/07/97	nr	nr	nr	n	nr	n	n	n	n	n	n	n	nr
06/04/97	815.95	6.75	0.847	n	nr	n	n	n	n	n	n	n	nr
09/25/97	810.99	7.68	1.29	n	nr	n	n	n	n	n	n	n	nr
12/16/97	808.68	6.82	0.858	n	n	n	n	n	n	n	n	n	nr
KMW 3	TOC ELEV: 826.46	So Cond:	1,1-Di	Chl 1,2	Tetra	1,1,1 Tri-	Trl	Chloro	Vinyl	Benzene	Toluene	Ethyl	Total
Date	W.L.	pH Units	mmhos	Chloro	Chloro	Chloro	Chloro	Chloro	Chloride			Benzene	Petroleum
				ethane	ethane	ethane	ethane	ethane					Hydrocarbons
08/23/95	811.83	7.0	1.21	n	nr	n	n	n	n	n	n	n	nr
11/14/95	812.72	6.5	0.80	n	nr	n	n	n	n	n	n	n	nr
02/16/96	811.44	6.5	0.98	n	nr	n	n	n	n	n	n	n	nr
05/29/96	814.24	5.5	0.82	n	nr	n	n	n	n	n	n	n	nr
09/18/96	810.46	6.5	0.80	n	nr	n	n	n	n	n	n	n	nr
11/22/96	807.48	6.0	1.12	n	nr	n	n	n	n	n	n	n	nr
02/08/97	nr	nr	nr	n	nr	n	n	n	n	n	n	n	nr
06/04/97	815.92	6.74	0.557	n	nr	n	n	n	n	n	n	n	nr
09/25/97	811	7.54	0.929	n	nr	n	n	n	n	n	n	n	nr
12/16/97	808.63	6.9	0.839	n	n	n	n	n	n	n	n	n	nr
KMW 4	TOC ELEV: 826.47	So Cond:	1,1-Di	Chl 1,2	Tetra	1,1,1 Tri-	Trl	Chloro	Vinyl	Benzene	Toluene	Ethyl	Total
Date	W.L.	pH Units	mmhos	Chloro	Chloro	Chloro	Chloro	Chloro	Chloride			Benzene	Petroleum
				ethane	ethane	ethane	ethane	ethane					Hydrocarbons
08/23/95	811.98	6.5	0.85	n	nr	n	n	n	n	n	n	n	nr
11/14/95	812.81	7.0	0.77	n	nr	n	n	n	n	n	n	n	nr
02/16/96	811.55	6.5	0.85	n	nr	n	n	n	n	n	n	n	nr
05/29/96	814.35	5.5	0.79	n	nr	n	n	n	n	n	n	n	nr
09/18/96	810.52	6.5	0.94	n	nr	n	n	n	n	n	n	n	nr
11/22/96	807.53	6.0	0.92	n	nr	n	n	1	n	n	n	n	nr
02/08/97	nr	nr	nr	n	nr	n	n	n	n	n	n	n	nr
06/04/97	815.94	6.72	0.633	n	nr	n	n	n	n	n	n	n	nr
09/25/97	811.01	7.4	1.031	n	nr	n	n	n	n	n	n	n	nr
12/16/97	808.67	6.8	0.911	n	n	n	n	n	n	n	n	n	nr

All data in DOB unless noted

n = Not detected at method detection limit  
nr = Not reported or not tested

**KIMBERLY-CLARK CORPORATION  
BROWN BRIDGE FACILITY  
TROY, OHIO  
GROUNDWATER SAMPLING ANALYSIS RESULTS**

EEB 7															
TOC ELEV: 827.83		pH Units	So Cond. mmhos	1,1-Di	Di 1,2	Tetra	1,1,1 Tri-	Tri	Chloro	Vinyl	Benzene	Toluene	Ethyl	Xylenes	Total
Date	W.L.			Chloro	Chloro	Chloro	Chloro	Chloro	ethane	Chloride			Benzene		Petroleum
				ethane	ethane	ethane	ethane	ethane							Hydrocarbons
07/20/94	809.94	nr	nr	0.90	n	n	n	1.6	n	n	n	16.000	n	n	nr
08/23/95	812.29	7.0	0.72	n	nr	n	n	2	n	n	n	n	n	n	nr
11/14/95	813.10	6.5	0.78	n	nr	n	n	3	n	n	n	n	n	n	nr
02/16/96	811.87	6.5	0.84	n	nr	n	n	2	n	n	n	n	n	n	nr
05/29/96	814.63	5.7	0.67	n	nr	n	n	n	n	n	n	n	n	n	nr
09/17/96	811.23	6.5	1.63	n	nr	n	n	n	n	n	n	n	n	n	nr
11/22/96	808.28	6.0	0.77	n	nr	n	n	2	n	n	n	n	n	n	nr
02/06/97	nr	nr	nr	n	nr	n	n	n	n	n	n	n	n	n	nr
EEB 8															
TOC ELEV: 827.7		pH Units	So Cond. mmhos	1,1-Di	Di 1,2	Tetra	1,1,1 Tri-	Tri	Chloro	Vinyl	Benzene	Toluene	Ethyl	Xylenes	Total
Date	W.L.			Chloro	Chloro	Chloro	Chloro	Chloro	ethane	Chloride			Benzene		Petroleum
				ethane	ethane	ethane	ethane	ethane							Hydrocarbons
07/20/94	810.08	nr	nr	2.5	2.3	n	n	5.3	n	n	11	10.000	n	n	nr
08/23/95	812.57	6.5	0.72	n	nr	n	n	n	n	n	n	59.000	n	n	nr
11/14/95	813.35	6.5	0.73	n	nr	n	n	n	n	n	n	1.200	n	n	nr
02/16/96	812.55	6.5	0.74	n	nr	n	n	n	n	n	n	32.000	n	n	nr
05/29/96	814.85	5.5	0.65	n	nr	n	n	n	n	n	n	n	n	n	nr
09/17/96	811.01	6.5	0.81	n	nr	n	n	3	n	n	n	n	n	n	nr
11/22/96	808.60	6.5	0.67	n	nr	n	n	170	n	n	n	n	n	n	nr
02/06/97	nr	nr	nr	n	nr	n	n	n	n	n	n	n	n	n	nr
EEB 9															
TOC ELEV: 825.78		pH Units	So Cond. mmhos	1,1-Di	Di 1,2	Tetra	1,1,1 Tri-	Tri	Chloro	Vinyl	Benzene	Toluene	Ethyl	Xylenes	Total
Date	W.L.			Chloro	Chloro	Chloro	Chloro	Chloro	ethane	Chloride			Benzene		Petroleum
				ethane	ethane	ethane	ethane	ethane							Hydrocarbons
07/20/94	810.42	nr	nr	21	4.1	0.3	6.6	1.3	10	n	11	160.000	38	65	nr
08/23/95	812.70	6.5	2.31	n	nr	n	n	n	n	n	n	n	n	n	nr
09/20/95	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	2.300	n	n	nr
11/14/95	813.03	6.5	1.55	n	nr	n	n	n	n	n	3	1.200	n	n	nr
02/16/96	812.16	6.5	1.91	n	nr	n	n	n	n	n	n	7.400	n	n	nr
05/29/96	814.40	5.5	0.88	n	nr	n	n	n	n	n	n	15.000	n	n	nr
09/18/96	810.63	7.0	1.00	2	nr	5	n	n	n	n	26	64.000	13	37	nr
11/22/96	nr	6.5	1.00	n	nr	n	n	n	n	n	n	10.000	n	n	nr
02/06/97	nr	nr	nr	n	nr	n	n	n	n	n	n	n	n	n	nr
06/04/97	815.89	6.63	0.97	n	nr	n	n	n	n	n	n	n	n	n	nr
09/25/97	811.03	7.84	1.103	n	nr	19	n	n	n	n	n	n	n	n	nr
12/17/97	808.99	7.14	2.17	n	n	n	n	n	n	n	n	n	n	n	nr
GZA 2															
TOC ELEV: 826.71		pH Units	So Cond. mmhos	1,1-Di	Di 1,2	Tetra	1,1,1 Tri-	Tri	Chloro	Vinyl	Benzene	Toluene	Ethyl	Xylenes	Total
Date	W.L.			Chloro	Chloro	Chloro	Chloro	Chloro	ethane	Chloride			Benzene		Petroleum
				ethane	ethane	ethane	ethane	ethane							Hydrocarbons
10/14/93	nr	nr	nr	n	n	1	n	n	n	n	n	0.32	n	n	nr
07/20/94	809.41	nr	nr	n	n	2.9	n	n	n	n	1.9	n	n	n	nr
08/23/95	812.42	7.0	1.04	n	nr	13	n	n	n	n	n	n	n	n	nr
11/15/95	813.21	7.0	1.01	n	nr	11	n	n	n	n	n	n	n	n	nr
02/16/96	811.70	6.5	1.13	n	nr	33	n	n	n	n	n	n	n	n	nr
05/29/96	813.07	5.5	0.76	n	nr	17	n	n	n	n	n	n	n	n	nr
09/18/96	810.19	6.5	0.90	n	nr	n	n	n	n	n	n	n	n	n	nr
11/22/96	807.55	6.5	0.93	n	nr	7	n	n	n	n	n	n	n	n	nr
03/04/98	809.81	nr	nr	n	n	17	n	n	n	n	n	n	n	n	nr

All data in ppb unless noted

n = Not detected at method detection limit

nr = Not reported or not tested

**KIMBERLY-CLARK CORPORATION**  
**BROWN BRIDGE FACILITY**  
**TROY, OHIO**  
**GROUNDWATER SAMPLING ANALYSIS RESULTS**

KMW 5															
Date	TOC Elev: 825.94 W.L.	pH Units	So Cond. mmhos	1,1-Di Chloro ethane	Chloro ethane	Tetra Chloro ethane	1,1,1 Tri- Chloro- ethane	Tri Chloro ethane	Chloro ethane	Vinyl Chloride	Benzene	Toluene	Ethyl Benzene	Xylenes	Total Petroleum Hydrocarbons
08/22/95	815.83	6.0	0.58	n	nr	n	n	n	n	n	n	n	n	n	n
11/15/95	815.09	6.8	1.44	n	nr	n	n	n	n	n	n	n	n	n	n
02/15/96	815.20	6.5	0.71	n	nr	n	n	n	n	n	n	n	n	n	nr
05/28/96	816.78	6.0	0.70	n	nr	n	n	n	n	n	n	n	n	n	nr
09/17/96	813.32	6.5	0.91	n	nr	17	5	4	n	n	n	n	n	n	nr
11/21/96	810.43	6.5	0.92	n	nr	n	1	1	n	n	n	n	n	n	nr
02/06/97	nr	nr	nr	3	nr	7	7	4	n	n	n	n	n	n	nr
06/03/97	816.87	6.49	1.05	1	nr	4	n	n	n	n	n	3	n	n	nr
12/17/97	810.83	7.12	1.042	n	6	n	n	n	n	n	n	n	n	n	nr
12/08/98	813.44	7.14	1.089	n	nr	12	6	6	n	n	n	n	n	n	nr
*12/16/99	813.56	7.14	1.089	2.4	3.2	13	4.5J	4.1	n	n	n	n	n	n	nr
12/13/00	814.74	7.19	0.857	1.6	2.5	8.1	3.4	2.9	n	n	n	n	n	n	nr
KMW 6															
Date	TOC Elev: 825.42 W.L.	pH Units	So Cond. mmhos	1,1-Di Chloro ethane	Chloro ethane	Tetra Chloro ethane	1,1,1 Tri- Chloro- ethane	Tri Chloro ethane	Chloro ethane	Vinyl Chloride	Benzene	Toluene	Ethyl Benzene	Xylenes	Total Petroleum Hydrocarbons
08/21/95	815.42	7.0	0.74	n	nr	n	3	4	n	n	n	n	n	n	n
11/15/95	814.43	6.5	0.73	n	nr	n	3	3	n	n	n	n	n	n	n
02/16/96	814.48	6.5	0.72	n	nr	n	5	3	n	n	n	n	n	n	nr
05/29/96	816.96	6.0	0.72	1	nr	n	5	7	n	n	n	n	n	n	nr
09/17/96	812.28	6.5	0.69	n	nr	23	n	3	n	n	n	n	n	n	nr
11/21/96	810.19	5.8	0.87	n	nr	66	1	7	n	n	n	n	n	n	nr
02/06/97	nr	nr	nr	n	nr	150	2	8	n	n	n	n	n	n	nr
06/03/97	819.44	6.84	0.721	n	nr	58	n	4	n	n	n	n	n	n	nr
09/25/97	811.52	8.13	0.942	13	nr	n	37	30	n	n	n	n	n	n	nr
12/17/97	810.4	7.66	0.663	n	nr	n	n	n	n	n	n	n	n	n	nr
03/04/98	812.3	nr	nr	n	nr	n	12	12	n	n	n	n	n	n	nr
06/03/98	812.22	8.09	0.889	n	nr	n	6	6	n	n	n	n	n	n	nr
09/02/98	811.89	7.85	1.025	n	nr	n	5	6	n	n	n	n	n	n	nr
12/08/98	812.64	7.66	0.699	n	nr	n	2EJ	n	n	n	n	n	n	n	nr
03/15/99	814.48	7.05	0.681	n	nr	n	3EJ	n	n	n	n	n	n	n	nr
06/16/99	813.06	6.94	0.61	n	nr	n	1J	n	n	n	n	n	n	n	nr
09/02/99	812.59	7.46	0.707	n	nr	n	n	n	n	n	n	n	n	n	nr
12/16/99	812.82	7.66	0.699	n	nr	n	n	n	n	n	n	n	n	n	nr
03/01/00	813.6	7.64	0.66	n	nr	n	n	n	n	n	n	n	n	n	nr
06/06/00	813.4	7.38	0.889	n	nr	n	n	n	n	n	n	n	n	n	nr
09/07/00	813.14	6.99	0.659	n	nr	n	n	n	n	n	n	n	n	n	nr
12/11/00	813.19	7.35	0.735	n	nr	n	n	n	n	n	n	n	n	n	nr
KMW 7															
Date	TOC Elev: 826.25 W.L.	pH Units	So Cond. mmhos	1,1-Di Chloro ethane	Chloro ethane	Tetra Chloro ethane	1,1,1 Tri- Chloro- ethane	Tri Chloro ethane	Chloro ethane	Vinyl Chloride	Benzene	Toluene	Ethyl Benzene	Xylenes	Total Petroleum Hydrocarbons
08/21/95	815.14	6.3	0.71	n	nr	n	n	n	n	n	n	n	n	n	n
11/15/95	815.05	7.0	0.81	n	nr	n	n	n	n	n	n	n	n	n	n
02/16/96	814.27	7.0	0.71	n	nr	n	n	n	n	n	n	n	n	n	nr
05/29/96	816.95	5.5	0.73	n	nr	n	n	n	n	n	n	n	n	n	nr
09/17/96	813.89	6.5	0.70	n	nr	n	5	1	n	n	n	n	n	n	nr
11/21/96	811.15	5.0	0.71	n	nr	n	n	n	n	n	n	n	n	n	nr
02/06/97	nr	nr	nr	3	nr	n	24	22	n	n	n	n	n	n	nr
06/03/97	819.26	7.39	0.852	n	nr	n	29	17	n	n	n	n	n	n	nr
09/25/97	811.91	8.03	1.302	n	nr	160	2	14	n	n	n	n	n	n	nr
12/17/97	811.26	7.21	0.874	n	nr	140	n	12	n	n	n	n	n	n	nr
03/04/98	812.98	nr	nr	n	nr	130	3	13	n	n	n	n	n	n	nr
06/03/98	813.25	8.1	1.194	n	nr	92	n	15	n	n	n	n	n	n	nr
09/02/98	812.50	7.95	1.1	n	nr	110	n	18	n	n	n	n	n	n	nr
12/08/98	813.27	7.47	0.713	n	nr	75	2EJ	11	n	n	n	n	n	n	nr
03/15/99	814.43	7.36	0.673	n	nr	75	1EJ	6	n	n	n	n	n	n	nr
06/16/99	813.52	6.82	0.648	n	nr	74	n	5	n	n	n	n	n	n	nr
09/02/99	813.09	7.3	0.676	n	nr	60	n	5	n	n	n	7	2	13	nr
12/16/99	813.37	7.47	0.713	n	nr	72	1.4J	6.5	n	n	n	n	n	n	nr
03/01/00	814.24	7.15	0.719	n	nr	45	n	4.4	n	n	n	n	n	n	nr
06/06/00	813.97	7.61	0.973	n	nr	27	n	3	n	n	n	n	n	n	nr
09/07/00	813.58	7.21	0.671	n	nr	20	n	n	n	n	n	n	n	n	nr
12/13/00	815.01	7.32	0.905	n	nr	25	n	2.4	n	n	n	n	n	n	nr

All data in caps unless noted

B = Analyte detected in laboratory method blank

D = Duplicate sample analysis

n = Not detected at method detection limit

E = Estimated concentration - exceeds instrument calibration range

nr = Not reported or not tested

J = Estimated concentration below quantitation limit

KIMBERLY-CLARK CORPORATION  
BROWN BRIDGE FACILITY  
TROY, OHIO  
GROUNDWATER SAMPLING ANALYSIS RESULTS

KMW 8	TOC ELEV: 825.32 W.L.	pH units	Sp Cond mmhos	1,1-Di Chloro ethane	Di 1,2 Chloro ethane	Tetra Chloro ethane	1,1,1,1-Tetra- Chloro- ethane	Tri Chloro ethane	Chloro ethane	Vinyl Chloride	Benzene	Toluene	Ethyl Benzene	Xylenes	Total Petroleum Hydrocarbons
Date															
08/23/95	814.21	6.50	0.74	6	nr	n	n	14	n	2	n	n	n	n	nr
11/15/95	814.22	6.50	0.81	6	nr	n	n	1	10	3	1	n	n	n	nr
02/15/96	813.90	6.50	0.78	2	nr	n	n	n	n	n	n	n	n	n	nr
05/29/96	816.15	6.50	0.73	4	nr	n	n	n	n	2	n	n	n	n	nr
09/17/96	nr	6.50	0.69	3	nr	n	4	18	n	2	n	n	n	n	nr
11/21/96	809.49	5.50	0.79	3	nr	n	4	n	n	n	n	n	n	n	nr
02/06/97	nr	nr	nr	3	nr	n	n	2	n	2	n	n	n	n	nr
06/03/97	810.26	7.06	0.596	n	nr	n	n	2	n	n	n	n	n	n	nr
09/25/97	811.00	8.57	1.034	2	nr	n	n	n	n	4	n	n	n	n	nr
12/17/97	809.98	7.25	1.177	n	n	n	n	n	n	n	n	n	n	n	nr
03/04/98	812.84	nr	nr	2	nr	n	n	1	n	n	n	n	n	n	nr
06/03/98	812.37	6.46	1.050	n	nr	n	n	n	n	n	n	n	n	n	nr
09/02/98	811.54	6.25	1.000	n	nr	n	n	2	n	n	n	n	n	n	nr
12/08/98	812.23	7.45	0.709	n	nr	n	n	2	n	n	n	n	n	n	nr
03/15/99	814.30	6.93	0.700	n	nr	n	n	n	n	n	n	n	n	n	nr
06/16/99	812.56	6.93	0.712	n	nr	n	n	1	n	n	n	n	n	n	nr
09/02/99	811.90	7.28	0.737	2E	nr	n	n	2	n	1E	n	n	n	n	nr
12/16/99	811.88	7.45	0.709	n	4.6	n	n	n	n	n	n	n	n	n	nr
03/01/00	813.42	7.42	0.638	n	3.8	n	n	n	n	n	n	n	n	n	nr
06/06/00	813.32	7.58	0.933	n	1.6	n	n	n	n	n	n	n	n	n	nr
09/07/00	812.75	6.29	0.581	n	19	n	n	n	n	n	n	n	n	n	nr
12/13/00	814.24	7.20	0.753	n	8.5	n	n	n	n	n	n	n	n	n	nr
KMW 9	TOC ELEV: 825.41 W.L.	pH units	Sp Cond. mmhos	1,1-Di Chloro ethane	Di 1,2 Chloro ethane	Tetra Chloro ethane	1,1,1,1-Tetra- Chloro- ethane	Tri Chloro ethane	Chloro ethane	Vinyl Chloride	Benzene	Toluene	Ethyl Benzene	Xylenes	Total Petroleum Hydrocarbons
Date															
08/23/95	814.41	6.5	0.74	1	nr	n	1	10	n	n	n	n	n	n	nr
11/15/95	814.55	6.5	0.73	3	nr	n	5	18	n	n	n	n	n	n	nr
02/15/96	813.79	6.5	0.73	n	nr	n	3	20	n	n	n	n	n	n	nr
05/29/96	816.42	5.5	0.66	n	nr	n	n	7	n	n	n	n	n	n	nr
09/17/96	813.11	6.5	0.75	5	nr	n	n	1	n	6	n	n	n	n	nr
11/21/96	809.76	6.5	0.85	2	nr	n	n	4	n	1	n	n	n	n	nr
02/06/97	nr	nr	nr	5	nr	n	8	11	n	2	n	n	n	n	nr
06/03/97	810.55	6.63	0.484	n	nr	n	2	10	n	n	n	n	n	n	nr
09/25/97	810.87	8.29	0.882	11	nr	n	9	16	n	10	n	n	n	n	nr
12/17/97	809.81	7.13	0.634	n	14	n	n	n	n	n	n	n	n	n	nr
03/04/98	811.89	nr	nr	n	nr	n	3	26	n	n	n	n	n	n	nr
06/03/98	812.35	6.06	0.994	5	nr	n	1	12	n	n	n	n	n	n	nr
09/02/98	811.49	7.99	1.027	2	nr	n	1	11	n	n	n	n	n	n	nr
12/08/98	812.57	7.54	0.690	n	nr	n	n	n	n	n	n	n	n	n	nr
03/15/99	814.75	7.04	0.668	n	nr	n	n	1	n	n	n	n	n	n	nr
06/16/99	813.41	7.07	0.672	n	nr	n	17	12	n	n	n	n	n	n	nr
09/02/99	812.40	7.37	0.587	n	nr	n	n	n	n	n	n	n	n	n	nr
12/16/99	811.91	7.54	0.690	n	3.2	n	1.6J	7.8	n	n	n	n	n	n	nr
03/01/00	813.79	7.52	0.653	n	1.6	n	n	2.6	n	n	n	n	n	n	nr
06/06/00	813.53	7.81	0.926	n	n	n	n	n	n	n	n	n	n	n	nr
09/07/00	813.01	7.48	0.587	n	5.2	n	n	16	n	n	n	n	n	n	nr
12/13/00	814.91	7.19	0.767	n	4.1	n	1.4	7.4	n	1.3PB	n	n	n	n	nr
EDB 4	TOC ELEV: 828.62 W.L.	pH units	Sp Cond mmhos	1,1-Di Chloro ethane	Di 1,2 Chloro ethane	Tetra Chloro ethane	1,1,1,1-Tetra- Chloro- ethane	Tri Chloro ethane	Chloro ethane	Vinyl Chloride	Benzene	Toluene	Ethyl Benzene	Xylenes	Total Petroleum Hydrocarbons
Date															
07/20/94	813.82	nr	nr	n	n	n	n	n	n	n	n	n	n	n	nr
08/22/95	816.27	6.0	0.94	n	nr	45	n	3	n	n	n	n	n	n	nr
11/15/95	815.19	n	n	n	nr	n	n	nr	n	n	n	n	n	n	nr
02/15/96	815.54	6.5	0.74	n	nr	18	n	n	n	n	n	n	n	n	nr
05/28/96	821.02	5.5	0.70	n	nr	7	n	n	n	n	n	n	n	n	nr
09/17/96	813.47	6.5	0.70	n	nr	100	n	5	n	n	n	n	n	n	nr
11/21/96	810.68	5.5	0.75	n	nr	14	n	3	n	n	n	n	n	n	nr
12/17/97	810.74	7.03	0.912	n	20	20	n	n	n	n	n	n	n	n	nr
12/08/98	813.72	7.55	0.776	n	nr	48	n	2	n	n	n	n	n	n	nr
12/13/00	814.46	7.12	0.696	n	35	74	n	3.4	n	n	n	n	n	n	nr

All data in ppb unless noted

B = Analyte detected in laboratory method blank

D = Duplicate sample analysis

n = Not detected at method detection limit

E = Estimated concentration - exceeds instrument calibration range

nr = Not reported or not tested

J = Estimated concentration below quantitation limit

**KIMBERLY-CLARK CORPORATION  
BROWN BRIDGE FACILITY  
TROY, OHIO  
GROUNDWATER SAMPLING ANALYSIS RESULTS**

TABLE 1

EDB 12														Total Petroleum Hydrocarbons			
Date	TOC ELEV: 828.48 W.L.	pH units	Sp Cond. m/mhos	1,1-Di Chloro ethane	Os 1,2 Di-chloro ethane	Tetra Chloro ethane	1,1,1 Tr- Chloro-ethane	Tri Chloro ethane	Chloro ethane	Vinyl Chloride	Benzene	Toluene	Ethyl Benzene	Xylenes			
07/20/94	813.44	nr	nr	0.8	n	n	n	n	n	n	n	29	n	n	n	nr	
08/21/95	815.30	6.5	0.73	n	nr	n	n	n	n	n	n	n	n	n	n	nr	
11/18/95	814.89	6.5	0.77	1	nr	n	n	n	n	n	n	1,800	1	n	n	nr	
02/15/96	814.20	6.5	0.75	n	nr	n	n	n	n	n	n	n	n	n	n	nr	
05/29/96	816.84	5.5	0.68	n	nr	n	n	n	n	n	n	n	n	n	n	nr	
08/17/96	813.02	7.0	0.70	n	nr	n	n	n	n	n	n	n	n	n	n	nr	
11/22/96	810.54	6.0	0.92	n	nr	n	n	n	n	n	n	n	n	n	n	nr	
02/06/97	nr	nr	nr	n	nr	n	n	2	n	n	n	n	n	n	n	nr	
06/03/97	820.37	6.8	0.536	n	nr	n	n	11	n	n	n	n	n	n	n	nr	
09/25/97	811.44	7.92	1.198	1	nr	n	n	5	n	n	n	n	n	n	n	nr	
12/17/97	810.54	7.29	0.872	n	16	n	n	n	n	n	n	n	n	n	n	nr	
03/04/98	812.4	nr	nr	n	nr	n	n	n	n	n	n	n	n	n	n	nr	
06/03/98	812.8	8.05	1.175	n	nr	n	n	2	n	n	n	n	n	n	n	nr	
09/02/98	812.05	7.99	1.1	n	nr	n	n	n	n	n	n	n	n	n	n	nr	
12/08/98	812.76	7.4	0.706	n	nr	n	n	n	n	n	n	n	n	n	n	nr	
03/15/99	814.08	6.68	0.697	n	nr	n	n	n	n	n	n	n	n	n	n	nr	
06/16/99	812.92	6.84	0.584	n	nr	n	n	n	n	n	n	n	n	n	n	nr	
09/02/99	811.68	7.31	0.601	n	nr	n	n	n	n	n	n	n	n	n	n	nr	
12/16/99	812.96	7.4	0.596	n	1.5	n	n	n	n	n	n	n	n	n	n	nr	
03/01/00	813.48	7.35	0.693	n	2.4	n	n	1.3	n	n	n	n	n	n	n	nr	
06/06/00	813.44	7.77	0.948	n	n	n	n	n	n	n	n	n	n	n	n	nr	
09/07/00	812.94	7.25	0.623	n	n	n	n	n	n	n	n	n	n	n	n	nr	
12/13/00	814.7	7.08	0.967	1.1	5.3	n	n	2.6	n	n	n	n	n	n	n	nr	

GZA 1														Total Petroleum Hydrocarbons			
Date	TOC ELEV: 828.33 W.L.	pH units	Sp Cond. m/mhos	1,1-Di Chloro ethane	Os 1,2 Di-chloro ethane	Tetra Chloro ethane	1,1,1 Tr- Chloro-ethane	Tri Chloro ethane	Chloro ethane	Vinyl Chloride	Benzene	Toluene	Ethyl Benzene	Xylenes			
10/14/93	nr	nr	nr	n	nr	31	0.41J	1.4	n	n	n	n	n	n	n	nr	
07/20/94	813.90	nr	nr	n	nr	28	0.6	5	n	n	n	n	n	n	n	nr	
08/22/95	816.03	7.0	1.02	n	nr	21	n	2	n	n	n	n	n	n	n	nr	
11/05/95	814.83	6.5	0.86	n	nr	20	1	2	n	n	n	n	n	n	n	nr	
02/15/96	815.33	6.5	0.79	n	nr	7	n	n	n	n	n	n	n	n	n	nr	
05/29/96	816.49	5.5	0.85	n	nr	43	n	2	n	n	n	n	n	n	n	nr	
08/16/96	813.48	6.5	0.90	n	nr	92	2	3	n	n	n	n	n	n	n	nr	
11/21/96	811.42	5.0	1.08	n	nr	41	1	2	n	n	n	n	n	n	n	nr	
12/17/97	811.59	7.0	1.083	n	n	36	n	n	n	n	n	n	n	n	n	nr	
12/08/98	813.58	7.2	1.105	n	nr	49	5	1	n	n	n	n	n	n	n	nr	
12/16/99	813.49	7.2	1.105	n	n	23	6.9	1.1	n	n	n	n	n	n	n	nr	
12/13/00	814.21	7.1	1.081	n	n	40	1.9	2.2	n	n	n	n	n	n	n	nr	

All data in ccb unless noted

B = Analysis detected in laboratory method blank

D = Duplicate sample analysis

n = Not detected at method detection limit

E = Estimated concentration - exceeds instrument calibration range

nr = Not reported or not tested

J = Estimated concentration below quantitation limit

## TABLE 1

PW 1	TOC Elev: 822.23 W.L.	pH Units	So Cond mmhos	1,1-Di Chloro ethane	Gis 1,2 Di-chloro ethane	Tetra Chloro ethane	1,1,1 Tr- Chloro-ethane	Tri Chloro ethane	Chloro ethane	Vinyl Chloride	Benzene	Toluene	Ethyl Benzene	Xylenes	Total Petroleum Hydrocarbons
Date															
08/23/95	nr	7.0	0.76	n	nr	n	n	n	n	n	n	n	n	n	180
11/15/95	809.53	6.5	0.77	n	nr	n	n	n	n	n	n	8	n	n	n
02/16/96	nr	6.0	0.71	n	nr	n	n	n	n	n	n	n	n	n	n
05/30/96	nr	6.5	0.69	n	nr	n	n	n	n	n	n	160	n	n	110
09/17/96	nr	6.5	0.48	n	nr	n	2	11	n	n	n	n	n	n	n
11/22/96	810.03	6.0	0.70	n	nr	n	n	8	n	n	n	n	n	n	n
02/06/97	nr	nr	nr	2	nr	n	n	4	n	n	n	n	n	n	nr
06/03/97	817.74	7	0.567	n	nr	n	1	12	n	n	n	n	n	n	nr
09/25/97	810.89	8.03	1.093	n	nr	n	n	8	n	n	n	n	n	n	nr
12/17/97	809.76	7.53	0.936	n	n	n	n	0	n	n	n	n	n	n	nr
03/04/98	811.86	nr	nr	n	n	n	n	5	n	n	n	n	n	n	nr
06/03/98	811.37	7.95	1.093	n	n	n	n	3	n	n	n	n	n	n	nr
09/02/98	811.69	8.1	1.12	n	n	n	n	130	n	n	n	n	n	n	nr
12/08/98	813.07	7.43	0.715	n	nr	n	n	n	n	n	n	n	n	n	nr
03/15/99	810.62	7.4	0.661	n	nr	n	n	n	n	n	n	n	n	n	nr
06/16/99	810.48	8.93	0.723	n	nr	n	n	n	n	n	n	n	n	n	nr
09/02/99	812.79	7.79	0.698	n	n	n	n	n	n	n	n	n	n	n	nr
12/16/99	812.98	7.42	0.715	n	n	n	n	n	n	n	n	n	n	n	nr
03/01/00	814.07	7.46	0.689	n	n	n	n	n	n	n	n	n	n	n	nr
06/06/00	813.69	7.69	0.974	n	n	n	n	n	n	n	n	n	n	n	nr
09/07/00	813.67	7.39	0.703	n	n	n	n	n	n	n	n	n	n	n	nr
12/13/00	814.22	7.18	0.804	n	n	n	n	n	n	n	n	n	n	n	nr

PW 2	TOC Elev: 822.21 W.L.	pH Units	So Cond mmhos	1,1-Di Chloro ethane	Gis 1,2 Di-chloro ethane	Tetra Chloro ethane	1,1,1 Tr- Chloro-ethane	Tri Chloro ethane	Chloro ethane	Vinyl Chloride	Benzene	Toluene	Ethyl Benzene	Xylenes	Total Petroleum Hydrocarbons
Date															
08/21/95	nr	6.5	0.78	n	nr	n	n	1	n	n	n	n	n	n	120
8/5/95	808.71	6.5	0.75	n	nr	n	n	n	n	n	n	n	n	n	530
11/15/95	nr	6.0	0.74	n	nr	n	n	n	n	n	n	n	n	n	n
02/16/96	nr	6.0	0.71	n	nr	n	n	n	n	n	n	n	n	n	n
05/30/96	nr	6.5	0.69	n	nr	n	n	n	n	n	n	n	n	n	n
09/18/96	nr	7.0	0.68	n	nr	n	n	n	n	n	n	n	n	n	n
11/21/96	nr	6.5	0.71	n	nr	n	n	n	n	n	n	n	n	n	n
02/06/97	nr	nr	nr	n	nr	n	n	n	n	n	n	330	n	n	nr
06/03/97	nr	6.89	0.631	n	nr	n	n	11	n	n	n	760	n	n	nr
09/25/97	nr	nr	nr	n	nr	n	n	n	n	n	n	n	n	n	nr
12/17/97	nr	7.55	0.684	n	n	n	n	n	n	n	n	n	n	n	nr
03/04/98	nr	nr	nr	n	nr	n	n	n	n	n	n	n	n	n	nr
06/03/98	nr	7.96	1.103	n	nr	n	n	n	n	n	n	n	n	n	nr
09/02/98	nr	8.1	1.058	n	nr	n	n	n	n	n	n	n	n	n	nr
12/08/98	nr	7.61	0.704	n	nr	n	n	n	n	n	n	n	n	n	nr
03/15/99	nr	7.31	0.68	n	nr	n	n	n	n	n	n	n	n	n	nr
06/16/99	nr	7.31	0.69	n	nr	n	n	n	n	n	n	n	n	n	nr
09/02/99	nr	7.4	0.715	n	nr	n	n	n	n	n	n	n	n	n	nr
12/16/99	nr	7.61	0.714	n	n	n	n	n	n	n	n	n	n	n	nr
03/01/00	nr	7.19	0.696	n	n	n	n	n	n	n	n	n	n	n	nr
06/06/00	nr	7.2	1.044	n	n	n	n	n	n	n	n	n	n	n	nr
09/07/00	nr	7.03	0.84	n	n	n	n	n	n	n	n	n	n	n	nr
12/13/00	nr	7.63	0.753	n	n	n	n	n	n	n	n	n	n	n	nr

**KIMBERLY-CLARK CORPORATION**  
**BROWN BRIDGE FACILITY**  
**TROT, OHIO**  
**GROUNDWATER SAMPLING ANALYSIS RESULTS**

PW 3	TOC ELEV: 821.65 W.L.	pH (units)	So Cond mmhos	1,1-Di Chloro ethane	Di 1,2 Chloro ethane	Tetra Chloro ethane	1,1,1 Tri- Chloro- ethane	Tri Chloro ethane	Chloro ethane	Vinyl Chloride	Benzene	Toluene	Ethyl Benzene	Xylenes	Total Petroleum Hydrocarbons
Date															
08/23/95	nr	6.5	0.77	24	nr	n	42	5	n	4	n	n	n	n	nr
11/15/95	806.78	6.5	0.71	29	nr	n	53	7	n	n	2	n	n	n	nr
02/16/96	nr	6.0	0.91	16	nr	n	27	2	n	6	n	n	n	n	nr
05/30/96	nr	6.0	0.91	n	nr	n	n	7	n	4	n	n	n	n	n
09/18/96	nr	6.5	0.78	23	nr	n	39	7	n	3	n	n	n	n	nr
11/21/96	nr	6.5	0.78	5	nr	n	8	2	n	2	n	n	n	n	nr
02/06/97	nr	nr	2	7	nr	n	4	3	n	n	n	n	n	n	nr
06/04/97	nr	6.92	1.07	1	nr	n	5	4	n	n	n	n	n	n	nr
09/25/97	nr	nr	7	7	nr	n	14	1	n	6	n	n	n	n	nr
12/17/97	nr	7.19	0.833	n	14	n	n	n	n	n	n	n	n	n	nr
03/04/98	nr	nr	n	n	n	n	2	n	n	n	n	n	n	n	nr
06/03/98	nr	7.46	1.199	4	nr	n	4	2	n	n	n	n	n	n	nr
09/02/98	nr	7.85	1.1	5	nr	n	3	n	n	1	n	n	n	n	nr
12/08/98	nr	7.36	0.791	11	nr	n	8	1	n	7	n	n	n	n	nr
03/15/99	nr	7.25	0.715	13	nr	n	10	3	n	6	n	n	n	n	nr
06/18/99	nr	7.25	0.715	16	nr	n	n	9	n	7	n	n	n	n	nr
09/02/99	nr	7.15	0.745	15	nr	n	15	3	n	13	n	n	n	n	nr
12/16/99	nr	7.36	0.791	5.2	35	n	4.97	1.1	n	n	n	n	n	n	nr
03/01/00	nr	6.88	0.896	5	36	n	4.83	2.1	n	2.095	n	n	n	n	nr
06/06/00	nr	7.05	1.086	6.3	53	n	7.4	3.4	n	6.7	n	n	n	n	nr
09/07/00	nr	7.12	0.65	9.9	45	n	11	12	n	9.2	n	n	n	n	nr
12/13/00	nr	7.53	0.82	14	52	n	9.9	9.5	n	8.095	n	n	n	n	nr

PW 4	TOC ELEV: 821.56 W.L.	pH (units)	So Cond mmhos	1,1-Di Chloro ethane	Di 1,2 Chloro ethane	Tetra Chloro ethane	1,1,1 Tri- Chloro- ethane	Tri Chloro ethane	Chloro ethane	Vinyl Chloride	Benzene	Toluene	Ethyl Benzene	Xylenes	Total Petroleum Hydrocarbons
Date															
08/23/95	nr	6.5	0.78	2	nr	n	n	n	n	n	n	n	n	n	nr
11/15/95	807.06	6.5	0.78	6	nr	n	6	3	n	n	n	n	n	n	nr
02/16/96	nr	6.0	0.79	4	nr	n	3	1	n	4	n	n	n	n	nr
05/30/96	nr	6.5	0.75	2	nr	n	1	n	n	3	n	n	n	n	nr
09/18/96	nr	6.5	0.74	9	nr	n	8	7	5	6	n	n	n	n	nr
11/21/96	nr	6.5	0.78	3	nr	n	2	n	n	4	n	n	n	n	nr
02/06/97	nr	nr	2	2	nr	n	n	2	n	n	n	n	n	n	nr
06/04/97	nr	7.04	0.578	n	19	n	n	2	n	n	n	n	n	n	nr
09/25/97	nr	nr	1	1	nr	n	1	n	n	1	n	n	n	n	nr
12/17/97	nr	7.15	0.843	n	10	n	n	n	n	n	n	n	n	n	nr
03/04/98	nr	nr	n	n	nr	n	n	n	n	n	n	n	n	n	nr
06/03/98	nr	7.89	1.086	n	nr	n	n	1	n	n	n	n	n	n	nr
09/02/98	nr	7.75	1.05	n	nr	n	n	n	n	n	n	n	n	n	nr
12/08/98	nr	7.39	0.687	n	nr	n	n	n	n	n	n	n	n	n	nr
03/15/99	nr	7.39	0.687	n	nr	n	1.6J	n	n	n	n	n	n	n	nr
06/18/99	nr	7.39	0.687	2J	nr	n	1.7	1	n	3J	n	n	n	n	nr
09/02/99	nr	7.25	0.705	1E	nr	n	n	n	n	1E	n	n	n	n	nr
12/16/99	nr	7.39	0.687	n	12	n	n	1.2	n	1.1	n	n	n	n	nr
03/01/00	nr	7.3	0.718	n	7.5	n	n	1.1	n	n	n	n	n	n	nr
06/06/00	nr	7.2	0.96	n	11	n	n	1.5	n	n	n	n	n	n	nr
09/07/00	nr	7.05	0.63	n	15	n	n	n	n	n	n	n	n	n	nr
12/13/00	nr	7.56	0.78	1.4	18	n	n	2.6	n	3.798	n	n	n	n	nr

All data in ccb unless noted

n = Not detected at method detection limit

nr = Not reported or not tested

**KIMBERLY-CLARK CORPORATION  
BROWN BRIDGE FACILITY  
TROY, OHIO  
GROUNDWATER SAMPLING ANALYSIS RESULTS**

EDS 2	TOC Elev: 825.75															Total Petroleum Hydrocarbon
Date	W.L.	pH Units	So Cond. mmhos	1,1-Di Chloro ethane	Cis 1,2 Di-chloro ethane	Tetra Chloro ethane	1,1,1 Tri-Chloro-ethane	Tri Chloro ethane	Chloro ethane	Vinyl Chloride	Benzene	Toluene	Ethyl Benzene	Xylenes		
07/20/94	819.50	nr		8.1	3.5	9.7	11	17	n	n	n	149,000	n	n		nr
08/21/95	815.65	7.0	0.72	n	nr	n	n	n	n	n	n	1,300	n	n		280
11/15/95	814.78	6.5	0.75	n	nr	n	n	n	n	n	n	35,000	n	n		1,900
02/15/96	814.65	6.5	0.74	n	nr	n	n	n	n	n	n	1,500	2	3		110
02/16/96	nr	6.5	0.89	n	nr	n	n	n	n	n	n	86,000	n	n		nr
03/29/96	816.70	5.5	0.87	n	nr	n	n	n	n	n	n	110,000	n	n		9,700
09/18/96	nr	6.5	0.69	n	nr	n	n	n	n	n	n	12,000	n	n		1,000
11/22/96	810.95	6.0	0.98	n	nr	n	n	n	n	n	n	65	n	n		220
02/06/97	nr	nr	nr	n	nr	n	n	n	n	n	n	2,700	2	12		nr
06/04/97	nr	6.9	0.97	n	nr	n	n	n	n	n	n	7,400	n	n		nr
09/25/97	nr	nr	nr	n	nr	n	n	n	n	n	n	14,000	16	36		nr
12/17/97	nr	7.2	0.783	n	n	n	n	n	7	n	n	n	n	n		nr
03/04/98	nr	nr	nr	n	nr	n	n	n	n	n	n	2,400	2	4		nr
06/03/98	nr	7.8	1.098	n	nr	n	n	n	n	n	n	9,900	13	21		nr
09/02/98	nr	8.0	1.085	n	nr	n	n	n	n	n	n	110	n	n		nr
12/08/98	nr	7.1	0.914	n	nr	n	n	n	n	n	n	8,600	n	n		nr
03/15/99	nr	7.2	0.768	25J	nr	n	36J	2	n	n	2	6,000	9	19		nr
06/16/99	nr	7.1	0.78	n	nr	n	n	n	n	n	n	810	1	6		nr
09/02/99	nr	7.2	0.768	n	nr	n	n	n	n	n	n	8	n	n		nr
12/16/99	nr	7.1	0.714	n	2.8	n	n	n	n	n	n	1,200	1.9	2.2		nr
03/01/00	nr	7.1	0.68	n	2.1	n	n	n	n	n	n	520	2.3	6.9		nr
06/06/00	nr	6.9	1.157	n	1.1	n	n	n	n	n	n	n	1.1	n		nr
09/07/00	nr	7.0	0.7	n	n	n	n	n	n	n	n	n	n	n		nr
12/13/00	nr	7.1	0.979	n	1.9	n	n	n	n	n	n	n	n	n		nr

System Inflow															
Date	W.L.	pH Units	So Cond. mmhos	1,1-Di Chloro ethane	Cis 1,2 Di-chloro ethane	Tetra Chloro ethane	1,1,1 Tri-Chloro-ethane	Tr Chloro ethane	Chloro ethane	Vinyl Chloride	Benzene	Toluene	Ethyl Benzene	Xylenes	Chloroform
08/22/95	NA	nr	nr	nr	nr	n	18	2	n	1	n	n	n	n	n
08/24/95	NA	nr	nr	11	nr	n	17	2	n	2	n	n	n	n	n
09/20/95	NA	nr	nr	9	nr	n	nr	nr	nr	nr	n	n	n	n	n
10/18/95	NA	nr	nr	nr	nr	nr	nr	nr	nr	nr	n	n	n	n	n
11/15/95	NA	nr	nr	6	nr	n	17	3	n	n	n	n	n	n	n
12/20/95	NA	nr	nr	4	nr	n	9	1	n	n	n	5	n	n	n
02/16/96	NA	6.0	0.76	4	nr	n	8	n	n	2	n	61	n	n	n
05/30/96	NA	6.5	0.73	3	nr	n	8	2	n	1	n	35	n	n	n
09/18/96	NA	6.5	0.73	3	nr	n	5	n	n	n	n	18	n	n	16
11/21/96	NA	6.5	0.74	1	nr	n	2	n	n	n	n	n	n	n	n
02/06/97	NA	nr	nr	nr	nr	n	n	n	n	n	n	800	n	3	n
06/03/97	NA	6.64	0.702	n	n	n	n	n	n	n	n	230	n	n	n
09/05/97	NA	6.91	nr	n	n	n	n	n	n	n	n	150	n	n	n
12/17/97	NA	7.03	2.7	n	n	n	n	n	n	n	n	91	n	n	n
03/04/98	NA	8.23	0.88	n	n	n	n	n	n	n	n	31	n	n	n
06/04/98	NA	8.67	0.85	n	n	n	n	n	n	n	n	n	n	n	n
09/02/98	NA	8.6	0.9	n	nr	n	n	n	n	n	n	87	n	n	n
12/08/98	NA	7.41	0.718	n	6	n	n	n	n	n	n	410	n	n	n
03/15/99	NA	7.76	0.728	n	nr	n	n	n	n	n	n	300	n	n	n
06/16/99	NA	7.21	0.696	n	nr	n	n	n	n	n	n	n	n	n	n
09/02/99	NA	7.07	0.715	n	nr	n	n	n	n	n	n	n	n	n	n
12/09/99	NA	7.34	0.759	n	n	n	n	n	n	n	n	n	n	n	n
03/01/00	NA	7.11	0.767	n	n	n	n	n	n	n	n	n	n	n	n
06/06/00	NA	6.78	1.163	n	18	n	n	n	n	n	n	n	n	n	n
09/07/00	NA	7.07	0.583	n	n	n	n	n	n	n	n	n	n	n	n
12/07/00	NA	7.04	0.721	n	n	n	n	n	n	n	n	n	n	n	n

All data in DOB unless noted

n = Not detected at method detection limit  
nr = Not reported or not tested



J. CLARK CORPORATION  
BROWN BRIDGE FACILITY  
TROY, OHIO  
GROUNDWATER SAMPLING ANALYSIS RESULTS

TABLE 1

Separator Effluent															
Date	W.L.	pH Units	Sp Cond mmhos	1,1-Di Chloro ethane	Di 1,2 Chloro ethane	Tetra Chloro ethane	1,1,1 Tri- Chloro- ethane	Tri Chloro ethane	Chloro ethane	Vinyl Chloride	Benzene	Toluene	Ethyl Benzene	Xylenes	Chloroform
08/24/95	NA	nr	nr	9	nr	n	13	2	n	1	n	n	n	n	n
09/29/95	NA	nr	nr	9	nr	n	18*	2	n	2	n	n	n	n	n
11/15/95	NA	nr	nr	7	nr	n	14	2	n	n	n	n	n	n	n
02/16/96	NA	6.5	0.77	n	nr	n	n	n	n	n	n	1900	n	n	n
03/22/96	NA	nr	nr	5	nr	n	10	2	n	1	n	23	n	n	n
05/30/96	NA	6.5	0.73	3	nr	n	7	2	n	n	n	31	n	n	n
09/18/96	NA	7.0	0.79	3	nr	n	7	1	n	n	n	170	n	n	48
11/21/96	NA	6.5	0.73	n	nr	n	1	n	n	n	n	n	n	n	n
02/06/97	NA	nr	nr	n	nr	n	n	n	n	n	n	680	n	2	n
06/03/97	NA	8.3	0.7	n	nr	n	n	n	n	n	n	680	n	2	n

\* 1,1,2 Trichloroethane was detected. 1,1,1 Trichloroethane was not detected.

System Effluent															
Date	W.L.	pH Units	Sp Cond mmhos	1,1-Di Chloro ethane	Di 1,2 Chloro ethane	Tetra Chloro ethane	1,1,1 Tri- Chloro- ethane	Tri Chloro ethane	Chloro ethane	Vinyl Chloride	Benzene	Toluene	Ethyl Benzene	Xylenes	Chloroform
08/22/95	NA	nr	nr	n	nr	n	n	n	n	n	n	n	n	n	n
08/24/95	NA	nr	nr	n	nr	n	n	n	n	n	n	n	n	n	n
09/20/95	NA	nr	nr	n	nr	n	n	n	n	n	n	n	n	n	n
10/18/95	NA	nr	nr	nr	nr	nr	nr	nr	nr	nr	n	n	n	n	n
11/15/95	NA	nr	nr	n	nr	n	n	n	n	n	n	n	n	n	n
12/20/95	NA	nr	nr	n	nr	n	n	n	n	n	n	n	n	n	n
02/16/96	NA	6.5	0.73	n	nr	n	n	n	n	n	n	12	n	n	n
03/22/96	NA	nr	nr	n	nr	n	n	n	n	n	n	n	n	n	n
05/30/96	NA	7.0	0.64	n	nr	n	n	n	n	n	n	n	n	n	n
09/18/96	NA	7.0	0.78	n	nr	n	n	n	n	n	n	784	n	n	3
10/14/96	NA	nr	nr	n	nr	n	n	n	n	n	n	n	n	n	n
11/21/96	NA	7.0	0.71	n	nr	n	n	n	n	n	n	n	n	n	n
02/06/97	NA	nr	nr	nr	nr	nr	nr	nr	nr	nr	n	28	n	n	n
05/12/97	NA	nr	nr	nr	nr	nr	nr	nr	nr	nr	n	4	n	n	n
06/03/97	NA	7.68	0.648	n	n	n	n	n	n	n	n	n	n	n	nr
09/05/97	NA	8.42	nr	n	n	n	n	n	n	n	n	n	n	n	n
12/17/97	NA	8.31	0.747	n	n	n	n	n	n	n	n	n	n	n	n
03/04/98	NA	8.72	0.857	n	n	n	n	n	n	n	n	n	n	n	n
06/04/98	NA	8.7	0.855	n	n	n	n	n	n	n	n	n	n	n	n
09/02/98	NA	8.45	0.93	n	nr	n	n	n	n	n	n	n	n	n	n
12/08/98	NA	8.45	0.93	n	n	n	n	n	n	n	n	n	n	n	n
03/15/99	NA	7.91	0.786	n	nr	n	n	n	n	n	n	n	n	n	n
06/16/99	NA	7.87	0.635	n	nr	n	n	n	n	n	n	n	n	n	n
09/02/99	NA	7.76	0.689	n	nr	n	n	n	n	n	n	n	n	n	n
12/09/99	NA	7.89	0.61	n	n	n	n	n	n	n	n	n	n	n	n
03/01/00	NA	8.09	0.77	n	n	n	n	n	n	n	n	n	n	n	n
06/06/00	NA	7.69	1.1	n	n	n	n	n	n	n	n	n	n	n	n
09/07/00	NA	7.7	0.84	n	n	n	n	n	n	n	n	n	n	n	n
12/07/00	NA	8.45	0.703	n	n	n	n	n	n	n	n	n	n	n	n

All data in ccb unless noted

n = Not detected at method detection limit

nr = Not reported or not tested

**TABLE 2**  
**SUMMARY COMPARISON TO CLEAN-UP GOALS, YEAR 1997**  
**EAST END GROUNDWATER REMEDIATION**  
**FORMER BROWN-BRIDGE FACILITY**  
**TROY, OHIO**

February 2001

Constituent	Clean-Up Goal (µg/L)	Maximum 1997 Concentration (µg/L) <sup>1</sup>	Well & Date of Max. Detection
Benzene	5	BDL <sup>2</sup>	NA
Toluene	1,000	BDL	NA
Ethylbenzene	700	BDL	NA
Xylenes	10,000	BDL	NA
Tetrachloroethene	5	<b>24</b>	<b>KMW-1 (2/7/97)<sup>3</sup></b>
Trichloroethene	5	<b>2</b>	<b>EEIB-7 (11/22/97)</b>
Cis-1,2-dichloroethene	70	BDL <sup>4</sup>	NA
Trans -1,2-trichloroethene	100	BDL <sup>4</sup>	NA
1,1,1-trichloroethane	200	<b>170<sup>5</sup></b>	<b>EEIB-8 (11/22/97)</b>
1,1-dichloroethane	200	BDL	NA
Chloroethane	200	BDL	NA
Vinyl chloride	2	BDL	NA

<sup>1</sup>Detections exceeding clean-up criteria are shown in **BOLD**.

<sup>2</sup>Below the laboratory's detection limits.

<sup>3</sup>KMW-1 is an upgradient monitoring well and results for this location represent background conditions.

<sup>4</sup>Not all samples collected in 1997 were analyzed for these constituents.

<sup>5</sup>This was the only detection of 1,1,1-trichloroethane in groundwater samples collected in 1997.

**TABLE 3**  
**SUMMARY COMPARISON TO CLEAN-UP GOALS, YEAR 2000**  
**WEST END GROUNDWATER REMEDIATION**  
**FORMER BROWN-BRIDGE FACILITY**  
**TROY, OHIO**

February 2001

Constituent	Clean-Up Goal (µg/L)	Maximum 2000 Concentration (µg/L) <sup>1</sup>	Well & Date of Max. Detection
Benzene	5	BDL <sup>2</sup>	NA
Toluene	1,000	520 <sup>3</sup>	EEIB-2 (3/1/00)
Ethylbenzene	700	2.3	EEIB-2 (3/1/00)
Xylenes	10,000	6.9	EEIB-2 (3/1/00)
Tetrachloroethene	5	74	<b>EEIB-4 (12/13/00)<sup>4</sup></b>
Trichloroethene	5	16	<b>KMW-9 (9/7/00)</b>
Cis-1,2-dichloroethene	70	53	PW-3 (6/6/00)
Trans -1,2-trichloroethene	100	1.2	PW-3 (12/13/00)
1,1,1-trichloroethane	200	11	PW-3 (9/7/00)
1,1-dichloroethane	200	14	PW-3 (12/13/00)
Chloroethane	200	BDL	NA
Vinyl chloride	2	9.2	<b>PW-3 (9/7/00)</b>

<sup>1</sup>Detections exceeding clean-up criteria are shown in **BOLD**.

<sup>2</sup>Below the laboratory's detection limits.

<sup>3</sup>This was the only detection of toluene in all samples from West End wells in 2000.

<sup>4</sup>EEIB-4 is an upgradient well and results from this location represent background conditions.

**TABLE 4**  
**PCE, TCE AND VINYL CHLORIDE IN GROUNDWATER SAMPLES**  
**WEST END GROUNDWATER REMEDIATION**  
**FORMER BROWN-BRIDGE FACILITY**  
**TROY, OHIO**

February 2001

Well	Tetrachloroethene <sup>1</sup>				Trichloroethene <sup>1</sup>				Vinyl Chloride <sup>1</sup>			
	Range (µg/L)	ū (ln)	δ (ln)	Confidence Interval	Range (µg/L)	ū (ln)	δ (ln)	Confidence Interval	Range (µg/L)	ū (ln)	δ (ln)	Confidence Interval
Background Wells:												
EEIB-4	BDL <sup>2</sup> -100	NE(B)	NE(B)	NE(B)	BDL-5	NE(B)	NE(B)	NE(B)	All BDL	NA	NA	NA
GZA-1	7-92	NE(B)	NE(B)	NE(B)	BDL-5	NE(B)	NE(B)	NE(B)	All BDL	NA	NA	NA
KMW-5	BDL-17	NE(B)	NE(B)	NE(B)	BDL-6	NE(B)	NE(B)	NE(B)	All BDL	NA	NA	NA
KMW-7 <sup>2</sup>	BDL-160	NE(B)	NE(B)	NE(B)	BDL-22	NE(B)	NE(B)	NE(B)	All BDL	NA	NA	NA
Downgradient Wells:												
KMW-6	BDL-150	NE(42)	NE(42)	NE (42)	BDL-30	NE (27)	NE (27)	NE (27)	All BDL	NA	NA	NA
KMW-8	All BDL	NA	NA	NA	BDL-18	NE (51)	NE (51)	NE (51)	BDL-8	NE (39)	NE (39)	NE (39)
KMW-9	All BDL	NA	NA	NA	BDL-26	0.48	1.00	-11.3, 12.3	BDL-18	NE (39)	NE (39)	NE (39)
EEIB-2	BDL-9.7	NE (77)	NE (77)	NE (77)	BDL-17	NE (77)	NE (77)	NE (77)	All BDL	NA	NA	NA
EEIB-12	All BDL	NA	NA	NA	BDL-11	NE (39)	NE (39)	NE (39)	All BDL	NA	NA	NA
PW-1	All BDL	NA	NA	NA	BDL-130	NE (27)	NE (27)	NE (27)	All BDL	NA	NA	NA
PW-2	All BDL	NA	NA	NA	BDL-11	NE (42)	NE (42)	NE (42)	All BDL	NA	NA	NA
PW-3	All BDL	NA	NA	NA	BDL-12	0.96	0.98	-10.6, 12.5	BDL-13	0.55	0.86	-9.2, 10.3
PW-4	All BDL	NA	NA	NA	BDL-7	NE (51)	NE (51)	NE (51)	BDL-6	NE (18) <sup>3</sup>	NE (18) <sup>3</sup>	NE (18) <sup>3</sup>

BDL – concentration below laboratory detection limits.

NE(B) – not evaluated; background well.

NE(#) – not evaluated; number in parentheses is the number of months since the clean-up goal was last exceeded (up to most recent data, December 2000).

NA – not applicable.

<sup>1</sup> Concentrations exceeding clean-up goals are shown in **BOLD**.

<sup>2</sup> KMW-7 is north of the former Bulk Storage area; however, potentiometric maps indicate that this well is upgradient of the areas of past releases.

<sup>3</sup> Vinyl chloride was detected at 3.7 µg/L in a sample from PW-4 collected in 12/00; however, the laboratory flagged this detection due to instrument calibration.

Note: ln of TCE clean-up goal (5 µg/L) is 1.6; ln of vinyl chloride clean-up goal is 0.7.

**APPENDIX C**  
**LABORATORY REPORTS**

**LABORATORY REPORTS**

**SEPTEMBER 2000**

**Sampling and Measurements  
of six Groundwater Monitoring Wells  
Four Pumping Wells and Water Sampling and Analysis of  
Effluent/Influent System at Spinnaker Coatings, Troy, Ohio**

**For**

**HYDROVISION, INC.  
7094 Peachtree Industrial Blvd.  
Suite 300,  
Norcross, Georgia 30371**

**Report No. 118292-0900-T295**

**September 28, 2000**



**BOWSER  
MORNER.**

# BOWSER-MORNER

4518 Taylorsville Road • P.O. Box 51 • Dayton, Ohio 45401 • 937/236-8805

## ENVIRONMENTAL REPORT

**REPORT TO:** HYDROVISION, INC.  
7094 Peachtree Industrial Blvd.  
Suite 300  
Norcross, Georgia 30371  
Attention: Mr. Steve McFadden

**REPORT DATE:** September 28, 2000

**REPORT NO.:** 118292-0900-T295

**REPORT ON:** Sampling and Measurements of six Groundwater Monitoring Wells, Four Pumping Wells and Water Sampling and Analysis of Effluent/Influent System at Spinnaker Coatings, Troy, Ohio

On September 7, 2000, water samples were collected from six groundwater monitoring wells, four pumping wells, and the influent and effluent systems on the Brown-Bridge site in Troy, Ohio. These samples were tested in the field for pH, temperature, and specific conductivity. Water levels in the six monitoring wells were measured. The four pumping wells, PW-2, PW-3, PW-4, and EEIB-2, were sampled from valves in the treatment building.

The following procedures were followed during the monitoring well sampling. First, the water level in each well was measured using a water tape that was decontaminated before being placed in each well. Based on the well depth, the volume of the wells were calculated using the formula on the Groundwater Monitoring Field Data Sheets in **Appendix A**. After at least three well volumes were bailed manually from each well, a water sample was manually collected and preserved according to the U.S. EPA SW-846 guidance for laboratory analysis, and shipped to the Severn Trent Laboratories, Inc. in Pensacola, Florida.

Water samples from each of the groundwater monitoring wells, pumping wells, and the influent and effluent systems were collected and tested in the field for temperature, pH, and conductivity by EPA Methods 150.1 and 120.0. The instruments were calibrated before the sampling began. The results of the field tests for the monitoring wells, pumping wells and production wells are summarized below in Table 1. Field Parameters for the Effluent and Influent samples are summarized in Table 2. Copies of the Field Notes are included in **Appendix A**.



TABLE 1  
RESULTS OF FIELD PARAMETERS  
MONITORING WELLS

Monitoring Well No.	Water Level (ft)	Temperature (°C)	pH	Conductivity
PW-1	8.56	22.4	7.39	703
KMW-6	12.28	22.5	6.99	659
KMW-7	12.67	20.6	7.21	671
KMW-8	12.57	21.3	6.29	581
KMW-9	12.40	22.6	7.48	587
EEIB-12	13.54	21.8	7.25	623
PW-2**	N/A	17.7	7.03	640
PW-3**	N/A	20.7	7.12	650
PW-4**	N/A	17.6	7.05	630
EEIB-2**	N/A	19.7	7.03	700

\*\*Sampled from valves in treatment building.  
N/A = Not applicable

Influent and effluent samples at the Spinnaker Coatings facility in Troy, Ohio were collected manually and preserved according to the U.S. EPA SW-846 guidance. The effluent sample was tested in the Bowser-Morner laboratory for volatile organic compounds (VOC's) by EPA Method 8260, total suspended solids (TSS) by EPA Method 160.2, total organic carbon (TOC) by EPA Method 415.1, and polynuclear aromatic hydrocarbons (PAH) by EPA Method 8100. The influent sample was tested in the Bowser-Morner laboratory for VOC's and PAH's only. The Chain-of-Custody Forms and the complete Laboratory Reports are included in Appendix B. The field parameters from the Influent and effluent samples are summarized in Table 2. The analytical results are summarized in Table 3.

TABLE 2  
RESULTS OF FIELD PARAMETERS  
SYSTEM EFFLUENT AND INFLUENT

Sample Location	Monitoring Point Type	Temperature (°C)	pH	Conductivity
System Influent	Influent	21.2	7.07	585
System Effluent	Effluent	17.94	7.70	640

TABLE 3  
ANALYTICAL RESULTS  
SYSTEM EFFLUENT AND INFLUENT

Sample Location	Analyte Detected*	Result	EPA Method No.	Date Analyzed
System-Effluent	Total Organic Carbon (TOC)	4.7 mg/L	415.1	9-12-00
System-Effluent	Total Suspended Solids (TSS)	4.0 mg/L	160.2	9-11-00
System-Effluent	Volatile Organic Compounds (VOC's)	All < MRL**	8260	9-18-00
System-Effluent	Polynuclear Aromatic Hydrocarbons (PAH)	All < MRL	8100	9-15-00
System Influent	Volatile Organic Compounds (VOC's)	All < MRL	8260	9-17-00
System Influent	PAH	All < MRL	8100	9-15-00

\*Only the analytes detected are summarized here.

\*\*MRL = Method Report Limit

mg/L = parts per million

ug/L = parts per billion

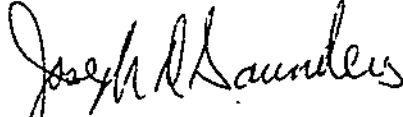


**BOWSER  
MORNER.**

Thank you for selecting Bowser-Morner, Inc. for this project. As always, your business is appreciated and we look forward to working with you again soon. In the meantime, if you have any questions or if we can help you in any way, please let us know.

Sincerely,

BOWSER-MORNER ASSOCIATES, INC.



Joseph D. Saunders  
Senior Environmental Scientist

JDS/kmw  
3-Client  
3-File

**APPENDIX A**  
**FIELD DATA SHEETS AND FIELD NOTES**



**BOWSER  
MORNIER.**

W.O. # 118292

Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 9-7-00

Monitoring Point Identification: PW-2

Monitoring Point Type: Spigot

Location: Treatment System Building Valve #2

Static Water Level (ft): N/A

Well Depth (ft): N/A

One Well Volume (gal): N/A

Actual Purge Volume (gal): N/A

$(\text{depth}) - (\text{swl}) = \text{head}$     $\text{head} \times \text{conversion factor} = 1 \text{ volume}$     $1 \text{ vol.} \times 3 = \text{purge volume}$   
conversion factor: 2" well diameter = 0.163 gal/ft   4" well diameter = 0.653 gal/ft

$(\text{depth}) - (\text{swl}) = \text{head}$     $\text{head} \times (0.163) = 1 \text{ volume}$     $1 \text{ vol.} \times 3 = \text{purge volume}$

Purging Device: N/A

Sampling Device: N/A

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Clear, no odor

### FIELD COMMENTS

\_\_\_\_\_  
\_\_\_\_\_

### FIELD ANALYSIS

Temperature (°C): 17.67

Specific Conductance (µmhos/cm³): 640

pH (SU): 7.03

Sampler Name: J. Denney / D. Coleman   Affiliation: BMI

W.O. # 118292  
Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 9-7-00

Monitoring Point Identification: PW-3

Monitoring Point Type: Spigot

Location: Treatment System Building Valve #3

Static Water Level (ft): N/A

Well Depth (ft): N/A

One Well Volume (gal): N/A

Actual Purge Volume (gal): N/A

( depth ) - ( swl ) = head head x conversion factor = 1 volume 1 vol. x 3 = purge volume  
conversion factor: 2" well diameter = 0.163 gal/ft 4" well diameter = 0.653 gal/ft

( 0.163 ) = ( 3 ) =

Purging Device: N/A

Sampling Device: N/A

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Clear, no odor

### FIELD COMMENTS

### FIELD ANALYSIS

Temperature ( °C ): 20.67

Specific Conductance (µmhos/cm³): 650

pH (SU): 7.12

ampler Name: J. Denney / D. Coleman Affiliation: BMI

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.Site: Spinnaker CoatingsDate: 9-7-00Monitoring Point Identification: PW-4Monitoring Point Type: SpigotLocation: Treatment System Building Valve #4Static Water Level (ft): N/AWell Depth (ft): N/AOne Well Volume (gal): N/AActual Purge Volume (gal): N/A

$(\text{depth}) - (\text{swl}) = \text{head}$ $\text{head} \times \text{conversion factor} = \text{volume}$ $1 \text{ vol.} \times 3 = \text{purge volume}$	
conversion factor: 2" well diameter = 0.163 gal/ft	4" well diameter = 0.653 gal/ft

$(\text{depth}) - (\text{swl}) = \text{head}$      $\text{head} \times \text{conversion factor} = \text{volume}$      $1 \text{ vol.} \times 3 = \text{purge volume}$

Purging Device: N/ASampling Device: N/AImmiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Clear, no odor

### FIELD COMMENTS

### FIELD ANALYSIS

Temperature (°C): 17.56Specific Conductance (µmhos/cm³): 630pH (SU): 7.05Sampler Name: J. Denney / D. Coleman Affiliation: BMI

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.Site: Spinnaker CoatingsDate: 9-7-00Monitoring Point Identification: PW-1Monitoring Point Type: 4" PVCLocation: Manhole NE of Treatment BuildingStatic Water Level (ft): 8.56Well Depth (ft): 20.0One Well Volume (gal): 7.5Actual Purge Volume (gal): 25.0

$(\text{depth}) - (\text{swl}) = \text{head}$ $\text{head} \times \text{conversion factor} = 1 \text{ volume}$ $1 \text{ vol.} \times 3 = \text{purge volume}$	
conversion factor: 2" well diameter = 0.163 gal/ft	4" well diameter = 0.653 gal/ft

$(20.00) - (8.56) = 11.44$      $11.44(0.653) = 7.5$      $7.5(3) = 22.5$

Purging Device: Disposable BailerSampling Device: Disposable BailerImmiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Cloudy, no odor

### FIELD COMMENTS

some vegetation-like debris

### FIELD ANALYSIS

Temperature (°C): 22.44Specific Conductance (µmhos/cm³): 703pH (SU): 7.39Sampler Name: J. Denney / D. Coleman Affiliation: BMI



W.O. # 118292  
Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 9-7-00

Monitoring Point Identification: EEIB-2

Monitoring Point Type: Spigot

Location: Treatment System Building Valve #1

Static Water Level (ft): N/A

Well Depth (ft): N/A

One Well Volume (gal): N/A

Actual Purge Volume (gal): N/A

$(\text{depth}) - (\text{swl}) = \text{head}$     $\text{head} \times \text{conversion factor} = 1 \text{ volume}$     $1 \text{ vol.} \times 3 = \text{purge volume}$   
conversion factor: 2" well diameter = 0.163 gal/ft   4" well diameter = 0.653 gal/ft

Purging Device: N/A

Sampling Device: N/A

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Clear, no odor

### FIELD COMMENTS

\_\_\_\_\_  
\_\_\_\_\_

### FIELD ANALYSIS

Temperature (°C): 19.72

Specific Conductance (µmhos/cm³): 700

pH (SU): 7.03

Sampler Name: J. Denney / D. Coleman Affiliation: BMI

W.O. # 118292  
Dept # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 9-7-00

Monitoring Point Identification: KMW-6

Monitoring Point Type: 2" PVC Flush Mount

Location: NW Treatment Bldg, Inside Fence

Static Water Level (ft): 12.28

Well Depth (ft): 20.0

One Well Volume (gal): 1.3

Actual Purge Volume (gal): 5.0

$(\text{depth}) - (\text{swl}) = \text{head}$     $\text{head} \times \text{conversion factor} = 1 \text{ volume}$     $1 \text{ vol.} \times 3 = \text{purge volume}$   
conversion factor: 2" well diameter = 0.163 gal/ft   4" well diameter = 0.653 gal/ft

$(20.0 - 12.28) = 7.72$     $7.72(0.163) = 1.3$     $1.3(3) = 3.9$

Purging Device: Disposable Bailer

Sampling Device: Disposable Bailer

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Cloudy, no odor

### FIELD COMMENTS

\_\_\_\_\_  
\_\_\_\_\_

### FIELD ANALYSIS

Temperature (°C): 22.5

Specific Conductance (µmhos/cm³): 659

pH (SU): 6.99

Sampler Name: J. Denney / D. Coleman   Affiliation: BMI

W.O. # 118292

Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 9-7-00

Monitoring Point Identification: KMW-7

Monitoring Point Type: 2" PVC Flush Mount

Location: NW Treatment Bldg. Along Fence

Static Water Level (ft): 12.67

Well Depth (ft): 20.0

One Well Volume (gal): 1.2

Actual Purge Volume (gal): 5.0

$(\text{depth}) - (\text{swl}) = \text{head}$  head x conversion factor = 1 volume 1 vol. x 3 = purge volume  
conversion factor: 2" well diameter = 0.163 gal/ft 4" well diameter = 0.653 gal/ft

$(20.0 - 12.67) = 7.33$   $7.33 (0.163) = 1.2$   $1.2 \times 3 = 3.6$

Purging Device: Disposable Bailer

Sampling Device: Disposable Bailer

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Cloudy, no odor

### FIELD COMMENTS

\_\_\_\_\_  
\_\_\_\_\_

### FIELD ANALYSIS

Temperature (°C): 20.61

Specific Conductance (µmhos/cm³): 671

pH (SU): 7.21

Sampler Name: J. Denney / D. Coleman Affiliation: BMI

W.O. # 118292  
Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 9-7-00

Monitoring Point Identification: KMW-8

Monitoring Point Type: 2" PVC Flush Mount

Location: NE Treatment Bldg. Outside Fence

Static Water Level (ft): 12.57

Well Depth (ft): 28.0

One Well Volume (gal): 2.5

Actual Purge Volume (gal): 8.0

$(\text{depth}) - (\text{swl}) = \text{head}$     $\text{head} \times \text{conversion factor} = \text{volume}$     $\text{1 vol.} \times 3 = \text{purge volume}$   
conversion factor: 2" well diameter = 0.163 gal/ft   4" well diameter = 0.653 gal/ft

$(28.00 - 12.57) = 15.43$     $15.43(0.163) = 2.5$     $2.5(3) = 7.5$

Purging Device: Disposable Bailer

Sampling Device: Disposable Bailer

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Cloudy, no odor

### FIELD COMMENTS

\_\_\_\_\_  
\_\_\_\_\_

### FIELD ANALYSIS

Temperature (°C): 21.33

Specific Conductance (µmhos/cm³): 581

pH (SU): 6.29

Sampler Name: J. Denney / D. Coleman Affiliation: BMI

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.Site: Spinnaker CoatingsDate: 9-7-00Monitoring Point Identification: KMW-9Monitoring Point Type: 2" PVC Flush MountLocation: Inside Electrical CageStatic Water Level (ft): 12.40Well Depth (ft): 25.0One Well Volume (gal): 2.05Actual Purge Volume (gal): 7.0

$(\text{depth}) - (\text{swl}) = \text{head}$ $\text{head} \times \text{conversion factor} = 1 \text{ volume}$ $1 \text{ vol.} \times 3 = \text{purge volume}$	
conversion factor: 2" well diameter = 0.163 gal/ft	4" well diameter = 0.653 gal/ft

$(25.0 - 12.40) = 12.60$     $12.60 \times (0.163) = 2.05$     $2.05(3) = 6.2$

Purging Device: Disposable BailerSampling Device: Disposable BailerImmiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Cloudy, no odor

### FIELD COMMENTS

Water in annulus over the wellcap

### FIELD ANALYSIS

Temperature (°C): 22.61Specific Conductance (µmhos/cm³): 587pH (SU): 7.48Sampler Name: J. Denney / D. Coleman Affiliation: BMI

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.Site: Spinnaker CoatingsDate: 9-7-00Monitoring Point Identification: EEIB -12Monitoring Point Type: 2" PVC Flush MountLocation: W of Electrical TowerStatic Water Level (ft): 13.54Well Depth (ft): 20.0One Well Volume (gal): 1.05Actual Purge Volume (gal): 4.0

$(\text{depth}) - (\text{swl}) = \text{head}$ $\text{head} \times \text{conversion factor} = 1 \text{ volume}$ $1 \text{ vol.} \times 3 = \text{purge volume}$	
conversion factor: 2" well diameter = 0.163 gal/ft	4" well diameter = 0.653 gal/ft

 $(20.0 - 13.54) = 6.46$     $6.46(0.163) = 1.05$     $1.05(3) = 3.16$ Purging Device: Disposable BailerSampling Device: Disposable BailerImmiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Cloudy, no odor

### FIELD COMMENTS

---

---

### FIELD ANALYSIS

Temperature (°C): 21.78Specific Conductance (µmhos/cm³): 623pH (SU): 7.25Sampler Name: J. Denney / D. Coleman Affiliation: BMI

**APPENDIX B**  
**ANALYTICAL RESULTS**  
**AND CHAIN-OF-CUSTODY FORMS**



**BOWSER  
MORNER.**



**BOWSER  
MORNER®**

COMMITTED TO EXCELLENCE  
SINCE 1911

Shipping: 4518 Taylorsville Rd. Dayton, OH 45424  
Mailing: P.O.Box 51 Dayton, OH 45401-0051  
937-236-8805  
937-237-9947 FAX

## LABORATORY REPORT

TO: JOSEPH D. SAUNDERS (@ BMI)  
HYDROVISION, INC.  
7094 PEACHTREE INDUSTRIAL BLVD  
SUITE 300  
NORCROSS, GA 30371

Report Date: 09/26/00  
Job Number : 118292  
Group No. : 32589  
Sample No. : 008734  
Auth/P.O.# :

Sample Identification: EFFLUENT

Date Sampled: 09/07/00

Date Received: 09/08/00

Analysis Description	Result	Units	MRL*	Method	Date/Analyst
Total Organic Carbon	4.7	mg/L	1.0	EPA 415.1	09/12/00 drb
Solids, Suspended	4.0	mg/L	1.0	EPA 160.2	09/11/00 drb

\* MRL = Method Report Limit

def2/7968/

Submitted by,

*Thomas M. Ryan*

Thomas M. Ryan, Senior Chemist  
Analytical Services Division





**BOWSER  
MORNER®**  
COMMITTED TO EXCELLENCE  
SINCE 1911

Shipping: 4518 Taylorsville Rd. Dayton, OH 45424  
Mailing: P.O.Box 51 Dayton, OH 45401-0051  
937-236-8805  
937-237-9947 FAX

## LABORATORY REPORT

TO: JOSEPH D. SAUNDERS (@ BMI)  
HYDROVISION, INC.  
7094 PEACHTREE INDUSTRIAL BLVD  
SUITE 300  
NORCROSS, GA 30371

Report Date: 09/26/00  
Job Number : 118292  
Group No. : 32589  
Sample No. : 008733  
Auth/P.O.# :

Sample Identification: INFLUENT

Date Sampled: 09/07/00

Date Received: 09/08/00

Analysis Description	Result	Units	MRL*	Method	Date/Analyst
Acenaphthene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Acenaphthylene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Anthracene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Benzo(a)Anthracene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Benzo(a)Pyrene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Benzo(b)Fluoranthene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Benzo(k)Fluoranthene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Benzo(g,h,i)Perylene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Chrysene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Dibenzo(a,h)Anthracene	<MRL	mg/L	0.025 EPA 8100		09/15/00 drb
Fluoranthene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Fluorene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Indeno(1,2,3-cd)Pyrene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Naphthalene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Phenanthrene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Pyrene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb

Submitted by,

*Thomas M. Ryan*

Thomas M. Ryan, Senior Chemist  
Analytical Services Division

\* MRL = Method Report Limit

pro1/7968/



**BOWSER  
MORNER**

COMMITTED TO EXCELLENCE  
SINCE 1911

Shipping: 4518 Taylorsville Rd. Dayton, OH 45424  
Mailing: P.O.Box 51 Dayton, OH 45401-0051  
937-236-8805  
937-237-9947 FAX

## LABORATORY REPORT

TO: JOSEPH D. SAUNDERS (@ BMI)  
HYDROVISION, INC.  
7094 PEACHTREE INDUSTRIAL BLVD  
SUITE 300  
NORCROSS, GA 30371

Report Date: 09/26/00  
Job Number : 118292  
Group No. : 32589  
Sample No. : 008734  
Auth/P.O.# :

Sample Identification: EFFLUENT

Date Sampled: 09/07/00

Date Received: 09/08/00

Analysis Description	Result	Units	MRL*	Method	Date/Analyst
Acenaphthene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Acenaphthylene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Anthracene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Benzo(a)Anthracene	<MRL	mg/L	0.050 EPA 8100		09/15/00 drb
Benzo(a)Pyrene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Benzo(b)Fluoranthene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Benzo(k)Fluoranthene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Benzo(g,h,i)Perylene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Chrysene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Dibenzo(a,h)Anthracene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Fluoranthene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Fluorene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Indeno(1,2,3-cd)Pyrene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Naphthalene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Phenanthrene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb
Pyrene	<MRL	mg/L	0.0050 EPA 8100		09/15/00 drb

Submitted by,

*Thomas M. Ryan*

Thomas M. Ryan, Senior Chemist  
Analytical Services Division

\* MRL = Method Report Limit

pro1/7968/



**BOWSER  
MORNIER®**

COMMITTED TO EXCELLENCE  
SINCE 1911

Shipping: 4518 Taylorsville Rd. Dayton, OH 45424  
Mailing: P.O.Box 51 Dayton, OH 45401-0051  
937-236-8805  
937-237-9947 FAX

## LABORATORY REPORT

TO: JOSEPH D. SAUNDERS (© BMI)  
HYDROVISION, INC.  
7094 PEACHTREE INDUSTRIAL BLVD  
SUITE 300  
NORCROSS, GA 30371

Report Date: 09/26/00  
Job Number : 118292  
Group No. : 32589  
Sample No. : 008733  
Auth/P.O.#.:

Sample Identification: INFLUENT

Date Sampled: 09/07/00

Date Received: 09/08/00

Analysis Description	Result	Units	MRL*	Method	Date/Analyst
Acetone	<MRL	mg/L	0.040	EPA 8260B	09/17/00 drb
Acrolein	---	ug/L	100.0	EPA 8260B	09/17/00 drb
Acrylonitrile	---	ug/L	100.0	EPA 8260B	09/17/00 drb
Benzene	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
Bromodichloromethane	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
Bromoform	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
Bromomethane	<MRL	mg/L	0.010	EPA 8260B	09/17/00 drb
Carbon disulfide	<MRL	mg/L	0.010	EPA 8260B	09/17/00 drb
Carbon tetrachloride	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
Chlorobenzene	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
Chloroethane	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
2-Chloroethylvinyl ether	<MRL	mg/L	0.010	EPA 8260B	09/17/00 drb
Chloroform	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
Chloromethane	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
Chlorodibromomethane	---	ug/L	5.0	EPA 8260B	09/17/00 drb
Dibromomethane	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
1,4-Dichlorobenzene	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
cis-1,3-Dichloropropene	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
trans-1,3-Dichloropropene	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
Dichlorodifluoromethane	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
1,1-Dichloroethane	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
1,2-Dichloroethane	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
1,1-Dichloroethene	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
trans-1,2-Dichloroethane	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
1,2-Dichloropropane	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
Ethylbenzene	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
2-Hexanone (MBK)	<MRL	mg/L	0.020	EPA 8260B	09/17/00 drb
2-Butanone (MEK)	<MRL	mg/L	0.020	EPA 8260B	09/17/00 drb
4-Methyl-2-pentanone (MIBK)	<MRL	mg/L	0.020	EPA 8260B	09/17/00 drb
Methylene Chloride	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb

Submitted by,

*Thomas M. Ryan*

Thomas M. Ryan, Senior Chemist  
Analytical Services Division

\* MRL = Method Report Limit

pro1/7968/



**BOWSER  
MORNER®**

COMMITTED TO EXCELLENCE  
SINCE 1911

Shipping: 4518 Taylorsville Rd. Dayton, OH 45424  
Mailing: P.O.Box 51 Dayton, OH 45401-0051  
937-236-8805  
937-237-9947 FAX

## LABORATORY REPORT

TO: JOSEPH D. SAUNDERS (@ BMI)  
HYDROVISION, INC.  
7094 PEACHTREE INDUSTRIAL BLVD  
SUITE 300  
NORCROSS, GA 30371

Report Date: 09/26/00  
Job Number : 118292  
Group No. : 32589  
Sample No. : 008733  
Auth/P.O.# :

Sample Identification: INFLUENT

Date Sampled: 09/07/00

Date Received: 09/08/00

Analysis Description	Result	Units	MRL*	Method	Date/Analyst
Styrene	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
1,1,2,2-Tetrachloroethane	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
Tetrachloroethene	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
Toluene	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
1,1,1-Trichloroethane	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
1,1,2-Trichloroethane	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
Trichloroethene	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
Trichlorofluoromethane	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
1,2,3-Trichloropropane	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
Vinyl Acetate	<MRL	mg/L	0.010	EPA 8260B	09/17/00 drb
Vinyl Chloride	<MRL	mg/L	0.0050	EPA 8260B	09/17/00 drb
Xylenes (total)	<MRL	mg/L	0.010	EPA 8260B	09/17/00 drb
CIS - 1,2 Dichloroethene	<MRL	mg/L	0.005	EPA 8260B	09/17/00 drb

Submitted by,

*Thomas M. Ryan*

Thomas M. Ryan, Senior Chemist  
Analytical Services Division

\* MRL = Method Report Limit

pro177968/



**BOWSER  
MORNER®**  
COMMITTED TO EXCELLENCE  
SINCE 1911

Shipping: 4518 Taylorsville Rd. Dayton, OH 45424  
Mailing: P.O. Box 51 Dayton, OH 45401-0051  
937-236-8805  
937-237-9947 FAX

## LABORATORY REPORT

TO: JOSEPH D. SAUNDERS (@ BMI)  
HYDROVISION, INC.  
7094 PEACHTREE INDUSTRIAL BLVD  
SUITE 300  
NORCROSS, GA 30371

Report Date: 09/26/00  
Job Number : 118292  
Group No. : 32589  
Sample No. : 008734  
Auth/P.O.# :

Sample Identification: EFFLUENT

Date Sampled: 09/07/00

Date Received: 09/08/00

Analysis Description	Result	Units	MRL*	Method	Date/Analyst
Acetone	<MRL	mg/L	0.040	EPA 8260B	09/18/00 drb
Acrolein	----	ug/L	100.0	EPA 8260B	09/18/00 drb
Acrylonitrile	----	ug/L	100.0	EPA 8260B	09/18/00 drb
Benzene	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
Bromodichloromethane	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
Bromoform	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
Bromomethane	<MRL	mg/L	0.010	EPA 8260B	09/18/00 drb
Carbon disulfide	<MRL	mg/L	0.010	EPA 8260B	09/18/00 drb
Carbon tetrachloride	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
Chlorobenzene	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
Chloroethane	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
2-Chloroethylvinyl ether	<MRL	mg/L	0.010	EPA 8260B	09/18/00 drb
Chloroform	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
Chloromethane	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
Chlorodibromomethane	----	ug/L	5.0	EPA 8260B	09/18/00 drb
Dibromomethane	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
1,4-Dichlorobenzene	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
cis-1,3-Dichloropropene	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
trans-1,3-Dichloropropene	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
Dichlorodifluoromethane	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
1,1-Dichloroethane	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
1,2-Dichloroethane	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
1,1-Dichloroethene	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
trans-1,2-Dichloroethene	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
1,2-Dichloropropane	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
Ethylbenzene	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
2-Hexanone (MBK)	<MRL	mg/L	0.020	EPA 8260B	09/18/00 drb
2-Butanone (MEK)	<MRL	mg/L	0.020	EPA 8260B	09/18/00 drb
4-Methyl-2-pentanone (MIBK)	<MRL	mg/L	0.020	EPA 8260B	09/18/00 drb
Methylene Chloride	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb

Submitted by,

*Thomas M. Ryan*

Thomas M. Ryan, Senior Chemist  
Analytical Services Division

\* MRL = Method Report Limit

pro1/7968/





**BOWSER  
MORNER®**

COMMITTED TO EXCELLENCE  
SINCE 1911

Shipping: 4518 Taylorsville Rd. Dayton, OH 45424  
Mailing: P.O.Box 51 Dayton, OH 45401-0051  
937-236-8805  
937-237-9947 FAX

## LABORATORY REPORT

TO: JOSEPH D. SAUNDERS (@ BMI)  
HYDROVISION, INC.  
7094 PEACHTREE INDUSTRIAL BLVD  
SUITE 300  
NORCROSS, GA 30371

Report Date: 09/26/00  
Job Number : 118292  
Group No. : 32589  
Sample No. : 008734  
Auth/P.O.# :

Sample Identification: EFFLUENT

Date Sampled: 09/07/00

Date Received: 09/08/00

Analysis Description	Result	Units	MRL*	Method	Date/Analyst
Styrene	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
1,1,2,2-Tetrachloroethane	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
Tetrachloroethene	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
Toluene	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
1,1,1-Trichloroethane	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
1,1,2-Trichloroethane	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
Trichloroethene	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
Trichlorofluoromethane	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
1,2,3-Trichloropropane	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
Vinyl Acetate	<MRL	mg/L	0.010	EPA 8260B	09/18/00 drb
Vinyl Chloride	<MRL	mg/L	0.0050	EPA 8260B	09/18/00 drb
Xylenes (total)	<MRL	mg/L	0.010	EPA 8260B	09/18/00 drb
CIS - 1,2 Dichloroethene	<MRL	mg/L	0.005	EPA 8260B	09/18/00 drb

Submitted by,

*Thomas M. Ryan*

Thomas M. Ryan, Senior Chemist  
Analytical Services Division

\* MRL = Method Report Limit

pro1/7968/



**Shipping Address:**  
4518 Taylorsville Road  
Dayton, OH 45424  
Phone (937) 236-8805  
Fax (937) 237-9947

**Shipping Address:**  
122 S. St. Clair St.  
Toledo, OH 43602  
Phone (419) 255-8200  
Fax (419) 255-7935

**2416-B Over Drive**  
Lexington, KY 40510  
Phone (606) 233-0250  
Fax (606) 253-0183

[illegible]

**Distribution:** White and yellow copies accompany sample(s) to laboratory. pink copy is retained by sampler.

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: C0-09167

Received: 08 SEP 00

Reported: 19 SEP 00

HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: KC-BROWN-BRIDGE

Sampled By: Client

Code: 091800919

Page 1

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED			
09167-1	PW-1	09-07-00/12:47			
09167-2	PW-2	09-07-00/12:15			
09167-3	PW-3	09-07-00/12:25			
09167-4	PW-4	09-07-00/12:07			
09167-5	KMW-6	09-07-00/12:50			
PARAMETER	09167-1	09167-2	09167-3	09167-4	09167-5
Volatile Organic Compounds (8260)					
Benzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Bromobenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Bromochloromethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Bromodichloromethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Bromoform, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Bromomethane (Methyl bromide), ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
2-Chlorotoluene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
4-Chlorotoluene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Dibromochloromethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Dibromomethane (Methylene bromide), ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dibromoethane (EDB), ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,3-Dichlorobenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,4-Dichlorobenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0



STL Pensacola

LOG NO: C0-09167

Received: 08 SEP 00

Reported: 19 SEP 00

HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: KC-BROWN-BRIDGE

Sampled By: Client

Code: 091800919

Page 2

## REPORT OF RESULTS

DATE/  
TIME SAMPLED

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	TIME SAMPLED				
09167-1	PW-1	09-07-00/12:47				
09167-2	PW-2	09-07-00/12:15				
09167-3	PW-3	09-07-00/12:25				
09167-4	PW-4	09-07-00/12:07				
09167-5	KMW-6	09-07-00/12:50				
PARAMETER	09167-1	09167-2	09167-3	09167-4	09167-5	
Dichlorodifluoromethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
1,1-Dichloroethane, ug/l	<5.0	<5.0	9.9	<5.0	<5.0	
1,2-Dichloroethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
1,1-Dichloroethene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
cis-1,2-Dichloroethene, ug/l	<5.0	<5.0	45	15	<5.0	
trans-1,2-Dichloroethene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
1,2-Dichloropropane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
1,3-Dichloropropane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
2,2 Dichloropropane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
cis-1,3-Dichloropropene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
trans-1,3-Dichloropropene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
Ethylbenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
Hexachlorobutadiene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
Isopropylbenzene (Cumene), ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
p-Isopropyltoluene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
Methylene chloride (Dichloromethane), ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
Methyl t-butyl ether (MTBE), ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
Naphthalene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
n-Butylbenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
n-Propylbenzene , ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	
sec-Butylbenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0	

STL Pensacola

LOG NO: C0-09167

Received: 08 SEP 00

Reported: 19 SEP 00

HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: KC-BROWN-BRIDGE

Sampled By: Client

Code: 091800919

Page 3

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED			
09167-1	PW-1	09-07-00/12:47			
09167-2	PW-2	09-07-00/12:15			
09167-3	PW-3	09-07-00/12:25			
09167-4	PW-4	09-07-00/12:07			
09167-5	KMW-6	09-07-00/12:50			
PARAMETER	09167-1	09167-2	09167-3	09167-4	09167-5
Styrene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
t-Butylbenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,1,2-Tetrachloroethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,1-Trichloroethane, ug/l	<5.0	<5.0	11	<5.0	<5.0
1,1,2-Trichloroethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,3-Trichlorobenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene, ug/l	<5.0	<5.0	12	<5.0	<5.0
Trichlorofluoromethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,3-Trichloropropane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trimethylbenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,3,5-Trimethylbenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride, ug/l	<5.0	<5.0	9.2	<5.0	<5.0
o-Xylene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
m&p-Xylene, ug/l	<10	<10	<10	<10	<10
Surrogate - Dibromofluoromethane	91 %	104 %	104 %	105 %	103 %
Surrogate - Toluene-d8	107 %	109 %	109 %	107 %	105 %
Surrogate - 4-Bromofluorobenzene	108 %	113 %	114 %	112 %	106 %
Analyst	WD	WD	WD	WD	WD
Analysis Date	09.11.00	09.11.00	09.11.00	09.11.00	09.11.00
Batch ID	LEW190	LEW190	LEW190	LEW190	LEW190
Prep Method	5030	5030	5030	5030	5030
Dilution Factor	1	1	1	1	1

STL Pensacola

LOG NO: C0-09167

Received: 08 SEP 00

Reported: 19 SEP 00

HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: KC-BROWN-BRIDGE

Sampled By: Client

Code: 091800919

Page 4

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED			
09167-6	KMW-7	09-07-00/12:40			
09167-7	KMW-8	09-07-00/13:04			
09167-8	KMW-9	09-07-00/13:00			
09167-9	EEIB-2	09-07-00/11:55			
09167-10	EEIB-12	09-07-00/12:57			
PARAMETER		09167-6	09167-7	09167-8	09167-9 09167-10
Volatile Organic Compounds (8260)					
Benzene, ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
Bromobenzene, ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
Bromochloromethane, ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
Bromodichloromethane, ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
Bromoform, ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
Bromomethane (Methyl bromide), ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
Carbon tetrachloride, ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
Chlorobenzene, ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
Chloroethane, ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
Chloroform, ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
Chloromethane, ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
2-Chlorotoluene, ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
4-Chlorotoluene, ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
Dibromochloromethane, ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
Dibromomethane (Methylene bromide), ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
1,2-Dibromoethane (EDB), ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
1,2-Dichlorobenzene, ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
1,3-Dichlorobenzene, ug/l		<5.0	<5.0	<5.0	<5.0 <5.0
1,4-Dichlorobenzene, ug/l		<5.0	<5.0	<5.0	<5.0 <5.0

STL Pensacola

LOG NO: C0-09167

Received: 08 SEP 00

Reported: 19 SEP 00

HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: KC-BROWN-BRIDGE

Sampled By: Client

Code: 091800919

Page 5

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED			
09167-6	KMW-7	09-07-00/12:40			
09167-7	KMW-8	09-07-00/13:04			
09167-8	KMW-9	09-07-00/13:00			
09167-9	EEIB-2	09-07-00/11:55			
09167-10	EEIB-12	09-07-00/12:57			
PARAMETER	09167-6	09167-7	09167-8	09167-9	09167-10
Dichlorodifluoromethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene, ug/l	<5.0	19	5.2	<5.0	<5.0
trans-1,2-Dichloroethene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,3-Dichloropropane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
2,2 Dichloropropane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachlorobutadiene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Isopropylbenzene (Cumene), ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
p-Isopropyltoluene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene chloride (Dichloromethane), ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-butyl ether (MTBE), ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Naphthalene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
n-Butylbenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
n-Propylbenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
sec-Butylbenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0

STL Pensacola

LOG NO: C0-09167

Received: 08 SEP 00

Reported: 19 SEP 00

HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: KC-BROWN-BRIDGE

Sampled By: Client

Code: 091800919

Page 6

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED			
09167-6	KMW-7	09-07-00/12:40			
09167-7	KMW-8	09-07-00/13:04			
09167-8	KMW-9	09-07-00/13:00			
09167-9	EEIB-2	09-07-00/11:55			
09167-10	EEIB-12	09-07-00/12:57			
PARAMETER	09167-6	09167-7	09167-8	09167-9	09167-10
Styrene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
t-Butylbenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,1,2-Tetrachloroethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane, ug/l	20	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,1-Trichloroethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,3-Trichlorobenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trichlorobenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene, ug/l	<5.0	<5.0	16	<5.0	<5.0
Trichlorofluoromethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,3-Trichloropropane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,2,4-Trimethylbenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,3,5-Trimethylbenzene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
o-Xylene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
m&p-Xylene, ug/l	<10	<10	<10	<10	<10
Surrogate - Dibromofluoromethane	103 %	107 %	116 %	101 %	103 %
Surrogate - Toluene-d8	107 %	109 %	114 %	108 %	106 %
Surrogate - 4-Bromofluorobenzene	111 %	112 %	117 %	110 %	111 %
Analyst	WD	WD	WD	WD	WD
Analysis Date	09.11.00	09.11.00	09.11.00	09.11.00	09.11.00
Batch ID	LEW190	LEW190	LEW190	LEW190	LEW190
Prep Method	5030	5030	5030	5030	5030
Dilution Factor	1	1	1	1	1

STL Pensacola

LOG NO: C0-09167

Received: 08 SEP 00

Reported: 19 SEP 00

HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: KC-BROWN-BRIDGE

Sampled By: Client

Code: 091800919

Page 7

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
09167-11	TRIP BLANK	09-07-00
PARAMETER	09167-11	
Volatile Organic Compounds (8260)		
Benzene, ug/l		<5.0
Bromobenzene, ug/l		<5.0
Bromochloromethane, ug/l		<5.0
Bromodichloromethane, ug/l		<5.0
Bromoform, ug/l		<5.0
Bromomethane (Methyl bromide), ug/l		<5.0
Carbon tetrachloride, ug/l		<5.0
Chlorobenzene, ug/l		<5.0
Chloroethane, ug/l		<5.0
Chloroform, ug/l		<5.0
Chloromethane, ug/l		<5.0
2-Chlorotoluene, ug/l		<5.0
4-Chlorotoluene, ug/l		<5.0
Dibromochloromethane, ug/l		<5.0
Dibromomethane (Methylene bromide), ug/l		<5.0
1,2-Dibromoethane (EDB), ug/l		<5.0
1,2-Dichlorobenzene, ug/l		<5.0
1,3-Dichlorobenzene, ug/l		<5.0
1,4-Dichlorobenzene, ug/l		<5.0
Dichlorodifluoromethane, ug/l		<5.0
1,1-Dichloroethane, ug/l		<5.0
1,2-Dichloroethane, ug/l		<5.0
1,1-Dichloroethene, ug/l		<5.0
cis-1,2-Dichloroethene, ug/l		<5.0
trans-1,2-Dichloroethene, ug/l		<5.0

STL Pensacola

LOG NO: C0-09167

Received: 08 SEP 00

Reported: 19 SEP 00

HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: KC-BROWN-BRIDGE

Sampled By: Client

Code: 091800919

Page 8

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
09167-11	TRIP BLANK	09-07-00
PARAMETER	09167-11	
1,2-Dichloropropane, ug/l	<5.0	
1,3-Dichloropropane, ug/l	<5.0	
2,2 Dichloropropane, ug/l	<5.0	
cis-1,3-Dichloropropene, ug/l	<5.0	
trans-1,3-Dichloropropene, ug/l	<5.0	
Ethylbenzene, ug/l	<5.0	
Hexachlorobutadiene, ug/l	<5.0	
Isopropylbenzene (Cumene), ug/l	<5.0	
p-Isopropyltoluene, ug/l	<5.0	
Methylene chloride (Dichloromethane), ug/l	<5.0	
Methyl t-butyl ether (MTBE), ug/l	<5.0	
Naphthalene, ug/l	<5.0	
n-Butylbenzene, ug/l	<5.0	
n-Propylbenzene , ug/l	<5.0	
sec-Butylbenzene, ug/l	<5.0	
Styrene, ug/l	<5.0	
t-Butylbenzene, ug/l	<5.0	
1,1,1,2-Tetrachloroethane, ug/l	<5.0	
1,1,2,2-Tetrachloroethane, ug/l	<5.0	
Tetrachloroethene, ug/l	<5.0	
Toluene, ug/l	<5.0	
1,1,1-Trichloroethane, ug/l	<5.0	
1,1,2-Trichloroethane, ug/l	<5.0	
1,2,3-Trichlorobenzene, ug/l	<5.0	
1,2,4-Trichlorobenzene, ug/l	<5.0	
Trichloroethene, ug/l	<5.0	

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: C0-09167

Received: 08 SEP 00

Reported: 19 SEP 00

HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: KC-BROWN-BRIDGE

Sampled By: Client

Code: 091800919

Page 9

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
09167-11	TRIP BLANK	09-07-00
PARAMETER	09167-11	
Trichlorofluoromethane, ug/l	<5.0	
1,2,3-Trichloropropane, ug/l	<5.0	
1,2,4-Trimethylbenzene, ug/l	<5.0	
1,3,5-Trimethylbenzene, ug/l	<5.0	
Vinyl chloride, ug/l	<5.0	
o-Xylene, ug/l	<5.0	
m&p-Xylene, ug/l	<10	
Surrogate - Dibromofluoromethane	108 %	
Surrogate - Toluene-d8	104 %	
Surrogate - 4-Bromofluorobenzene	109 %	
Analyst	WD	
Analysis Date	09.11.00	
Batch ID	LEW190	
Prep Method	5030	
Dilution Factor	1	



STL Pensacola

LOG NO: C0-09167

Received: 08 SEP 00

Reported: 19 SEP 00

HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: KC-BROWN-BRIDGE

Sampled By: Client

Code: 091800919

Page 10

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
09167-12	Method Blank	
09167-13	Lab Control Standard % Recovery	
PARAMETER	09167-12	09167-13
Volatile Organic Compounds (8260)		
Benzene, ug/l	<5.0	94 %
Bromobenzene, ug/l	<5.0	---
Bromochloromethane, ug/l	<5.0	---
Bromodichloromethane, ug/l	<5.0	---
Bromoform, ug/l	<5.0	---
Bromomethane (Methyl bromide), ug/l	<5.0	---
Carbon tetrachloride, ug/l	<5.0	---
Chlorobenzene, ug/l	<5.0	98 %
Chloroethane, ug/l	<5.0	---
Chloroform, ug/l	<5.0	---
Chloromethane, ug/l	<5.0	---
2-Chlorotoluene, ug/l	<5.0	---
4-Chlorotoluene, ug/l	<5.0	---
Dibromochloromethane, ug/l	<5.0	---
Dibromomethane (Methylene bromide), ug/l	<5.0	---
1,2-Dibromoethane (EDB), ug/l	<5.0	---
1,2-Dichlorobenzene, ug/l	<5.0	---
1,3-Dichlorobenzene, ug/l	<5.0	---
1,4-Dichlorobenzene, ug/l	<5.0	---
Dichlorodifluoromethane, ug/l	<5.0	---
1,1-Dichloroethane, ug/l	<5.0	---
1,2-Dichloroethane, ug/l	<5.0	---
1,1-Dichloroethene, ug/l	<5.0	94 %
cis-1,2-Dichloroethene, ug/l	<5.0	---

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: C0-09167

Received: 08 SEP 00

Reported: 19 SEP 00

HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: KC-BROWN-BRIDGE

Sampled By: Client

Code: 091800919

Page 11

## REPORT OF RESULTS

DATE/

TIME SAMPLED

LOG NO SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES

09167-12 Method Blank

09167-13 Lab Control Standard % Recovery

## PARAMETER

09167-12

09167-13

trans-1,2-Dichloroethene, ug/l

&lt;5.0

---

1,2-Dichloropropane, ug/l

&lt;5.0

---

1,3-Dichloropropane, ug/l

&lt;5.0

---

2,2 Dichloropropane, ug/l

&lt;5.0

---

cis-1,3-Dichloropropene, ug/l

&lt;5.0

---

trans-1,3-Dichloropropene, ug/l

&lt;5.0

---

Ethylbenzene, ug/l

&lt;5.0

---

Hexachlorobutadiene, ug/l

&lt;5.0

---

Isopropylbenzene (Cumene), ug/l

&lt;5.0

---

p-Isopropyltoluene, ug/l

&lt;5.0

---

Methylene chloride (Dichloromethane), ug/l

&lt;5.0

---

Methyl t-butyl ether (MTBE), ug/l

&lt;5.0

---

Naphthalene, ug/l

&lt;5.0

---

n-Butylbenzene, ug/l

&lt;5.0

---

n-Propylbenzene, ug/l

&lt;5.0

---

sec-Butylbenzene, ug/l

&lt;5.0

---

Styrene, ug/l

&lt;5.0

---

t-Butylbenzene, ug/l

&lt;5.0

---

1,1,1,2-Tetrachloroethane, ug/l

&lt;5.0

---

1,1,2,2-Tetrachloroethane, ug/l

&lt;5.0

---

Tetrachloroethene, ug/l

&lt;5.0

---

Toluene, ug/l

&lt;5.0

102 %

1,1,1-Trichloroethane, ug/l

&lt;5.0

---

1,1,2-Trichloroethane, ug/l

&lt;5.0

---

1,2,3-Trichlorobenzene, ug/l

&lt;5.0

---

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: C0-09167

Received: 08 SEP 00

Reported: 19 SEP 00

HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: KC-BROWN-BRIDGE

Sampled By: Client

Code: 091800919


Page 12

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
09167-12	Method Blank	
09167-13	Lab Control Standard % Recovery	

PARAMETER	09167-12	09167-13
1,2,4-Trichlorobenzene, ug/l	<5.0	---
Trichloroethene, ug/l	<5.0	94 %
Trichlorofluoromethane, ug/l	<5.0	---
1,2,3-Trichloropropane, ug/l	<5.0	---
1,2,4-Trimethylbenzene, ug/l	<5.0	---
1,3,5-Trimethylbenzene, ug/l	<5.0	---
Vinyl chloride, ug/l	<5.0	---
o-Xylene, ug/l	<5.0	---
m&p-Xylene, ug/l	<10	---
Surrogate - Dibromofluoromethane	70 %	97 %
Surrogate - Toluene-d8	87 %	107 %
Surrogate - 4-Bromofluorobenzene	92 %	107 %
Analyst	WD	WD
Analysis Date	09.11.00	09.11.00
Batch ID	LEW190	LEW190
Prep Method	5030	5030
Dilution Factor	1	1

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

  
Rick Hayes, Project Manager

Final Page Of Report



Severn Trent Laboratories, Inc.  
Pensacola, FL 32514  
Tel: (850) 474-1001  
Fax: (850) 478-2671

## Data Qualifiers for Final Report

### STL-Pensacola Inorganic/Organic

B1	The analyte was detected in the associated method blank (sample itself is flagged even though sample is ND).
B2	The analyte was detected in the sample(s) and in the associated method blank analyzed on the day samples were extruded; however, this analyte was not detected in the blank analyzed with the samples.
B3	The analyte was found in the associated blank as well as in the associated sample(s) (qualifier is applied to the sample, not to the blank).
B4	Sample results were corrected due to contaminants in Fractionation Blank
D	Diluted out (surrogate or spike due to sample dilution)
E	Compound concentration exceeds the upper calibration range of the instrument.
F	The reported value is < STL-Pensacola RL and > the STL-Pensacola MDL; therefore, the quantitation is estimation (The STL-PN RL is at or above lowest calibration standard in the initial calibration curve).
G	Sample and/or duplicate result is at or below 5 X (times) the STL Reporting Limit and the absolute difference between the sample and duplicate result is at or below the STL reporting limit; therefore, the results are "in control".
H1	Sample and/or duplicate is below 5 X (times) the STL Reporting Limit and the absolute difference between the results exceeds the STL Reporting Limit; therefore, the results are "out of control"
H2	Sample and duplicate (or MS and MSD) RPD is above control limit.
J (description)	The analyte was positively identified, the quantitation may be an estimation
J4	(For positive results) Temperature limits exceeded ( $\leq 2^{\circ}\text{C}$ or $\geq 6^{\circ}\text{C}$ ), non-reportable for NPDES compliance monitoring.
J6	(For positive results) LCS or Surrogate %R is > upper control limit (UCL), results may be biased high
J7	The reported value is > the laboratory MDL and < lowest calibration standard; therefore, the quantitation is an estimation (this qualifier should only be used when the STL-PN RL is below the lowest calibration standard in the initial calibration).
J8	Matrix spike and post spike recoveries are outside control limits. See out of Control Events/Corrective Action Form.
J9	(For positive results) LCS or Surrogate %R is < lower control limit (LCL), results may be biased low
M1	A matrix effect was present (1 sample, MS or MSD was analyzed twice to confirm surrogate/spike failure, 2 sample and/or MS/MSD chromatogram(s) had interfering peaks, 3 sample result was > 4 X spike added, 4 metals serial dilution was performed, or 5 metals post spike is < 40% R)
M2	The MS and/or MSD %R or RPD was outside upper or lower control limits; not necessarily due to matrix effect.
N/C	Not Calculable; Sample spiked is > 4X spike concentration (may also use this flag in place of negative numbers)
ih	Sample and duplicate results are "out of control". The sample is nonhomogeneous.
ioMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)
2	The analytical (post digestion) spike is reported due to the percent recovery being outside limits on the matrix (pre-digestion) spike.
R (description)	The data may be unusable due to deficiencies in the ability to analyze the sample and meet QC criteria
R1	(For nondetects) Temperature limits exceeded ( $\leq 2^{\circ}\text{C}$ or $\geq 6^{\circ}\text{C}$ ); non-reportable for NPDES compliance monitoring
R2	Improper preservation, no preservative present or insufficient amounts of preservative in sample upon receipt, non-reportable for NPDES compliance monitoring
R3	Improper preservation, incorrect preservative present in sample upon receipt, non-reportable for NPDES compliance
R4	Holding time exceeded, non-reportable for NPDES compliance monitoring.
R5	Collection requirements not met, improper container used for sample
R6	LCS or surrogate %R is < LCL and analyte is not detected or surrogate %R is < 10% for detects/nondetects.
R7	Internal standard area outside -50% to +100% of calibration verification standard.
R8	Initial calibration or any calibration verification exceeds acceptance criteria.
R9	Not filtered and preserved at time of collection.
R10	Headspace > 1/4" in diameter in volatile vials, non-reportable for NPDES compliance monitoring
R11	Samples were filtered and preserved within 4 hours of collection.
R12	Analysis performed outside the 12-hour tune or not within tune criteria.
S1	The Method of Standard Additions (MSA) has been performed on this sample.
S2	Incorrect sample amount was submitted to the laboratory for analysis
S3 (Flashpoint)	This method is not designed for solids and the results may not be accepted by any regulator for such purposes.
T	Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound.
TIC	The compound is not within the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound.
U	The reported value is < Laboratory MDL (value for result will be the MDL, never below the MDL)
W	Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance.
@	Adjusted reporting limit due to sample composition, not due to overcal (dilution prior to digestion and/or analysis).
#	Elevated reporting limit due to insufficient sample size
1 pt	The compound has been quantitated against a one point calibration.
* (Metals & Wet Chem)	Elevated reporting limit due to matrix interference (dilution prior to digestion and/or analysis)

SEVERN TRENT LABORATORIES, INC. - PENSACOLA, FLORIDA  
STATE CERTIFICATIONS

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)

Arkansas Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental)

State of California, Department of Health Services, Laboratory ID No. 2338 (Hazardous Waste and Wastewater)

State of Connecticut, Department of Health Services, Connecticut Lab Approval No. PH-0697 (Drinking Water, Hazardous Waste and Wastewater)

Delaware Health & Social Services, Division of Public Health, Laboratory ID No. FL094 (Drinking Water by Reciprocity with FL)

Florida DOH Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater)

Florida, Radioactive Materials License No. G0733-1

Foreign Soil Permit, Permit No. S-37599

Kansas Department of Health & Environment, Laboratory ID No. E10253 (Wastewater and Hazardous Waste)

Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Laboratory ID No. 90043 (Drinking Water)

State of Louisiana, DHH, Office of Public Health Division of Laboratories, Laboratory ID No. LA000017 (Drinking Water)

State of Maryland, DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)

Commonwealth of Massachusetts, DEP, Laboratory ID No. M-FL094 (Hazardous Waste and Wastewater)

State of Michigan, Bureau of E&OcCH, Laboratory ID No. 9912 (Drinking Water by Reciprocity with Florida)

New Hampshire DES ELAP, Laboratory ID No. 250599A (Wastewater)

State of New Jersey, Department of Environmental Protection & Energy, Laboratory ID No. 49006 (Wastewater and Hazardous Waste)

New York State, Department of Health, Laboratory ID No. 11503 (Wastewater and Solids/Hazardous Waste)

North Carolina Department of Environment & Natural Resources, Laboratory ID No. 314 (Hazardous Waste and Wastewater)

North Dakota DH&Consol Labs, Laboratory ID No. R-108 (Hazardous Waste and Wastewater by Reciprocity with Florida)

State of Oklahoma, Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)

Commonwealth of Pennsylvania, Department of Environmental Resources, Laboratory ID No. 68-467 (Drinking Water)

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater by Reciprocity with FL and Solids/Hazardous Waste by Reciprocity with CA)

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)

Tennessee Division of Underground Storage Tanks Approved Laboratory

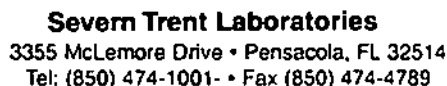
Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)

State of Washington, Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater)

West Virginia Division of Environmental Protection, Office of Water Resources, Laboratory ID No. 136 (Hazardous Waste and Wastewater by Reciprocity with FL)

American Industrial Hygiene Association (AIHA) Accredited Laboratory, Laboratory ID No. 100704

word\certlist\condcert.lst      revised 07/13/00



LAB ACCESSION # C009167

[illegible]



# Severn Trent Laboratories of Florida

## PROJECT SAMPLE INSPECTION FORM

Lab Order #: CC9167

Date Received: 9-8-00

- |   |   |
|---|---|
| <p>1. Was there a Chain of Custody? <u>(Yes)</u> No*</p> <p>2. Was Chain of Custody properly filled out and relinquished? Yes <u>(No*)</u></p> <p>3. Were samples received cold? <u>(Yes)</u> No* N/A<br/>(Criteria: 2° - 6°C: STL-SOP 1055)</p> <p>4. Were all samples properly labeled and identified? <u>(Yes)</u> No*</p> <p>5. Did samples require splitting or compositing*? Yes* <u>(No)</u><br/>Req By: PM Client Other*</p> <p>6. Were samples received in proper containers for analysis requested? <u>(Yes)</u> No*</p> <p>7. Were all sample containers received intact? <u>(Yes)</u> No*</p> | <p>8. Were samples checked for preservative? (Check pH of all H<sub>2</sub>O requiring preservative (STL-PH SOP 917) except VOA vials that require zero headspace) Yes No* <u>(N/A)</u></p> <p>9. Is there sufficient volume for analysis requested? <u>(Yes)</u> No* N/A (Can)</p> <p>10. Were samples received within Holding Time? <u>(Yes)</u> No* (REFER TO STL-SOP 1040)</p> <p>11. Is Headspace visible &gt; 1/4" in diameter in VOA vials? If any headspace is evident, comment in out-of-control section. Yes* <u>(No)</u> N/A</p> <p>12. If sent, were matrix spike bottles returned? Yes No* <u>(N/A)</u></p> <p>13. Was Project Manager notified of problems? (initials: <u>JE</u>) PSIF <u>(Yes)</u> No* N/A</p> |
|---|---|

Airbill Number(s): J108 565718 8

Shipped By: UPS

Cooler Number(s): CLIENT

Shipping Charges: N/A

Cooler Weight(s): 14#

Cooler Temp(s) (°C): 2°C  
(CK3)  
(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

### Out of Control Events and Inspection Comments:

2. NO CLIENT INFORMATION LISTED ON COC. 9-8-00

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: JE Date: 9-8-00 Logged By: LL Date: 08-Sep-00

- \* Note all Out-of-Control and/or questionable events on Comment Section of this form.
- \* If Other, note who requested the splitting or compositing of samples on the Comment Section of this form. All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"
- \* All preservatives for the State of North Carolina, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (STL-SOP 938, section 2.2.9).
- \* According to EPA, 1/4" of headspace is allowed in 40 ml vials requiring volatile analysis, however, STL makes it policy to record any headspace as out-of-control (STL-SOP 938, section 2.2.12).



**LABORATORY REPORTS**

**DECEMBER 2000**

**Sampling and Measurements  
of Nine Groundwater Monitoring Wells  
Four Pumping Wells and Water Sampling and Analysis of  
Effluent/Influent System at Spinnaker Coatings, Troy, Ohio**

**For**

**HYDROVISION, INC.  
7094 Peachtree Industrial Blvd.  
Suite 300,  
Norcross, Georgia 30371**

**Report No. 118292-1200-T382**

**December 22, 2000**



**BOWSER  
MORNER.**

# BOWSER-MORNER

4518 Taylorsville Road • P.O. Box 51 • Dayton, Ohio 45401 • 937/236-8805

## ENVIRONMENTAL REPORT

**REPORT TO:** HYDROVISION, INC.  
7094 Peachtree Industrial Blvd.  
Suite 300  
Norcross, Georgia 30371  
Attention: Mr. Steve McFadden

**REPORT DATE:** December 22, 2000

**REPORT NO.:** 118292-1200-T382

**REPORT ON:** Sampling and Measurements of six Groundwater Monitoring Wells, Four Pumping Wells and Water Sampling and Analysis of Effluent/Influent System at Spinnaker Coatings, Troy, Ohio

On December 8, 2000 and December 13, 2000, water samples were collected from six groundwater monitoring wells, four pumping wells, and the influent and effluent systems on the Brown-Bridge site in Troy, Ohio. These samples were tested in the field for pH, temperature, and specific conductivity. Water levels in the six monitoring wells were measured. The four pumping wells, PW-2, PW-3, PW-4, and EEIB-2, were sampled from valves in the treatment building.

The following procedures were followed during the monitoring well sampling. First, the water level in each well was measured using a water tape that was decontaminated before being placed in each well. Based on the well depth, the volume of the wells were calculated using the formula on the Groundwater Monitoring Field Data Sheets in **Appendix A**. After at least three well volumes were bailed manually from each well, a water sample was manually collected and preserved according to the U.S. EPA SW-846 guidance for laboratory analysis, and shipped to the Severn Trent Laboratories, Inc. in Pensacola, Florida.

Water samples from each of the groundwater monitoring wells, pumping wells, and the influent and effluent systems were collected and tested in the field for temperature, pH, and conductivity by EPA Methods 150.1 and 120.0. The instruments were calibrated before the sampling began. The results of the field tests for the monitoring wells, pumping wells and production wells are summarized below in Table 1. Field Parameters for the Effluent and Influent samples are summarized in Table 2. Copies of the Field Notes are included in **Appendix A**.

TABLE 1  
RESULTS OF FIELD PARAMETERS  
MONITORING WELLS

Monitoring Well No.	Water Level (ft)	Temperature (°C)	pH	Conductivity
PW-1	8.01	10.6	7.18	804
KMW-6	12.23	13.2	7.35	735
KMW-7	11.24	10.6	7.32	905
KMW-8	11.08	10.7	7.20	755
KMW-9	11.10	10.8	7.19	767
EEIB-12	11.78	9.8	7.08	967
PW-2**	N/A	12.8	7.63	753
PW-3**	N/A	14.5	7.53	820
PW-4**	N/A	13.3	7.56	760
EEIB-2**	N/A	13.4	7.07	979
KMW-5	11.20	11.8	7.19	857
GZA-1	14.12	12.1	7.11	1081
EEIB-4	14.16	10.1	7.12	696

\*\*Sampled from valves in treatment building.  
N/A = Not applicable

Influent and effluent samples at the Spinnaker Coatings facility in Troy, Ohio were collected manually and preserved according to the U.S. EPA SW-846 guidance. The effluent sample was tested in the Bowser-Morner laboratory for volatile organic compounds (VOC's) by EPA Method 8260, total suspended solids (TSS) by EPA Method 160.2, total organic carbon (TOC) by EPA Method 415.1, and polynuclear aromatic hydrocarbons (PAH) by EPA Method 8100. The influent sample was tested in the Bowser-Morner laboratory for VOC's and PAH's only. The Chain-of-Custody Forms and the complete Laboratory Reports are included in **Appendix B**. The field parameters from the Influent and effluent samples are summarized in Table 2. The analytical results are summarized in Table 3.

TABLE 2  
RESULTS OF FIELD PARAMETERS  
SYSTEM EFFLUENT AND INFLUENT

Sample Location	Monitoring Point Type	Temperature (°C)	pH	Conductivity
System Influent	Spigot	13.5	7.04	721
System Effluent	4" Pipe	13.5	8.45	703

TABLE 3  
ANALYTICAL RESULTS  
SYSTEM EFFLUENT AND INFLUENT

Sample Location	Analyte Detected*	Result	EPA Method No.	Date Analyzed
System-Effluent	Total Organic Carbon (TOC)	2.9 mg/L	415.1	12-14-00
System-Effluent	Total Suspended Solids (TSS)	72.0 mg/L	160.2	12-11-00
System-Effluent	Volatile Organic Compounds (VOC's)	All < MRL**	8260	12-13-00
System-Effluent	Polynuclear Aromatic Hydrocarbons (PAH)	All < MRL	8100	12-19-00
System Influent	Volatile Organic Compounds (VOC's)	All < MRL	8260	12-13-00
System Influent	PAH	All < MRL	8100	12-19-00

\*Only the analytes detected are summarized here.

\*\*MRL = Method Report Limit

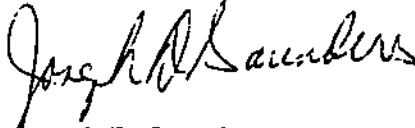
mg/L = parts per million

ug/L = parts per billion

Thank you for selecting Bowser-Morner, Inc. for this project. As always, your business is appreciated and we look forward to working with you again soon. In the meantime, if you have any questions or if we can help you in any way, please let us know.

Sincerely,

BOWSER-MORNER ASSOCIATES, INC.



Joseph D. Saunders  
Senior Environmental Scientist

JDS/kmw  
3-Client  
3-File

**APPENDIX A**  
**FIELD DATA SHEETS AND FIELD NOTES**



**BOWSER  
MORNER.**

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.Site: Spinnaker CoatingsDate: 12-13-00Monitoring Point Identification: EEIB-2Monitoring Point Type: SpigotLocation: Treatment System Building Valve #1Static Water Level (ft): N/AWell Depth (ft): N/AOne Well Volume (gal): N/AActual Purge Volume (gal): N/A

( depth ) - ( swl ) = head head x conversion factor = 1 volume 1 vol. x 3 = purge volume  
conversion factor: 2" well diameter = 0.163 gal/ft 4" well diameter = 0.653 gal/ft

Purging Device: N/ASampling Device: N/AImmiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Clear, no odor

### FIELD COMMENTS

### FIELD ANALYSIS

Temperature ( °C ): 13.4Specific Conductance (µmhos/cm³): 979pH (SU): 7.07Sampler Name: J. Saunders Affiliation: BMI



## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.Site: Spinnaker CoatingsDate: 12-13-00Monitoring Point Identification: PW-2Monitoring Point Type: SpigotLocation: Treatment System Building Valve #2Static Water Level (ft): N/AWell Depth (ft): N/AOne Well Volume (gal): N/AActual Purge Volume (gal): N/A

( depth ) - ( swl ) = head   head x conversion factor = 1 volume   1 vol. x 3 = purge volume  
conversion factor: 2" well diameter = 0.163 gal/ft   4" well diameter = 0.653 gal/ft

( 3 ) x ( 0.163 ) = 0.489   ( 3 ) = 0.489

Purging Device: N/ASampling Device: N/AImmiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Clear, no odor**FIELD COMMENTS**

\_\_\_\_\_  
\_\_\_\_\_

**FIELD ANALYSIS**Temperature ( °C ): 12.8Specific Conductance (  $\mu\text{mhos}/\text{cm}^3$  ): 753pH (SU): 7.63Sampler Name: J. Saunders Affiliation: BMI

W.O. # 118292

Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 12-13-00

Monitoring Point Identification: PW-3

Monitoring Point Type: Spigot

Location: Treatment System Building Valve #3

Static Water Level (ft): N/A

Well Depth (ft): N/A

One Well Volume (gal): N/A

Actual Purge Volume (gal): N/A

$(\text{depth}) - (\text{swl}) = \text{head}$     $\text{head} \times \text{conversion factor} = 1 \text{ volume}$     $1 \text{ vol.} \times 3 = \text{purge volume}$   
conversion factor: 2" well diameter = 0.163 gal/ft   4" well diameter = 0.653 gal/ft

$(\text{depth}) - (\text{swl}) = \text{head}$     $\text{head} \times (0.163) = 1 \text{ volume}$     $1 \text{ vol.} \times (3) = \text{purge volume}$

Purging Device: N/A

Sampling Device: N/A

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Clear, no odor

### FIELD COMMENTS

\_\_\_\_\_  
\_\_\_\_\_

### FIELD ANALYSIS

Temperature (°C): 14.5

Specific Conductance (µmhos/cm³): 820

pH (SU): 7.53

Sampler Name: J. Saunders   Affiliation: BMI

W.O. # 118292

Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinneraker Coatings

Date: 12-13-00

Monitoring Point Identification: PW-4

Monitoring Point Type: Spigot

Location: Treatment System Building Valve #4

Static Water Level (ft): N/A

Well Depth (ft): N/A

One Well Volume (gal): N/A

Actual Purge Volume (gal): N/A

$(\text{depth}) - (\text{swl}) = \text{head}$  head x conversion factor = 1 volume 1 vol. x 3 = purge volume  
conversion factor: 2" well diameter = 0.163 gal/ft 4" well diameter = 0.653 gal/ft

Purging Device: N/A

Sampling Device: N/A

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Clear, no odor

### FIELD COMMENTS

### FIELD ANALYSIS

Temperature (°C): 13.3

Specific Conductance (µmhos/cm³): 760

pH (SU): 7.56

Sampler Name: J. Saunders Affiliation: BMI

W.O. # 118292

Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 12-13-00

Monitoring Point Identification: PW-1

Monitoring Point Type: 4" PVC

Location: Manhole NE of Treatment Building

Static Water Level (ft): 8.01

Well Depth (ft): 20.0

One Well Volume (gal): 7.8

Actual Purge Volume (gal): 25.0

$(\text{depth}) - (\text{swl}) = \text{head}$  head x conversion factor = 1 volume 1 vol. x 3 = purge volume  
conversion factor: 2" well diameter = 0.163 gal/ft 4" well diameter = 0.653 gal/ft

$(20.00) - (8.01) = 11.99$   $11.99(0.653) = 7.8$   $7.8(3) = 23.4$

Purging Device: Disposable Bailer

Sampling Device: Disposable Bailer

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Cloudy, no odor

### FIELD COMMENTS

some vegetation-like debris

### FIELD ANALYSIS

Temperature (°C): 10.6

Specific Conductance (µmhos/cm³): 804

pH (SU): 7.18

Sampler Name: J. Saunders Affiliation: BMI

W.O. # 118292

Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 12-11-00

Monitoring Point Identification: KMW-6

Monitoring Point Type: 2" PVC Flush Mount

Location: NW Treatment Bldg, Inside Fence

Static Water Level (ft): 12.23

Well Depth (ft): 20.0

One Well Volume (gal): 1.3

Actual Purge Volume (gal): 5.0

$(\text{depth}) - (\text{swl}) = \text{head}$   $\text{head} \times \text{conversion factor} = \text{volume}$   $\text{1 vol.} \times 3 = \text{purge volume}$   
conversion factor: 2" well diameter = 0.163 gal/ft      4" well diameter = 0.653 gal/ft

$(20.0 - 12.23) = 7.77 \text{ ft}$   $7.77(0.163) = 1.3$   $1.3(3) = 3.9$

Purging Device: Disposable Bailer

Sampling Device: Disposable Bailer

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Cloudy, no odor

### FIELD COMMENTS

### FIELD ANALYSIS

Temperature (°C): 13.2

Specific Conductance (µmhos/cm³): 735

pH (SU): 7.35

Collector Name: J. Saunders

Affiliation: BMI

W.O. # 118292  
Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 12-13-00

Monitoring Point Identification: KMW-7

Monitoring Point Type: 2" PVC Flush Mount

Location: NW Treatment Bldg. Along Fence

Static Water Level (ft): 11.24

Well Depth (ft): 20.0

One Well Volume (gal): 1.4

Actual Purge Volume (gal): 5.0

$(\text{depth}) - (\text{swl}) = \text{head}$  head x conversion factor = 1 volume 1 vol. x 3 = purge volume  
conversion factor: 2" well diameter = 0.163 gal/ft 4" well diameter = 0.653 gal/ft

$(20.0 - 11.24) = 8.76$   $8.76(0.163) = 1.4$   $1.4(3) = 4.2$

Purging Device: Disposable Bailer

Sampling Device: Disposable Bailer

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Cloudy, no odor

### FIELD COMMENTS

\_\_\_\_\_  
\_\_\_\_\_

### FIELD ANALYSIS

Temperature (°C): 10.6

Specific Conductance (µmhos/cm³): 905

pH (SU): 7.32

Sampler Name: J. Saunders Affiliation: BMI

W.O. # 118292  
Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 12-13-00

Monitoring Point Identification: KMW-8

Monitoring Point Type: 2" PVC Flush Mount

Location: NE Treatment Bldg. Outside Fence

Static Water Level (ft): 11.08

Well Depth (ft): 28.0

One Well Volume (gal): 2.8

Actual Purge Volume (gal): 10.0

$(\text{depth}) - (\text{swl}) = \text{head}$   $\text{head} \times \text{conversion factor} = \text{volume}$   $\text{1 vol.} \times 3 = \text{purge volume}$   
conversion factor: 2" well diameter = 0.163 gal/ft      4" well diameter = 0.653 gal/ft

$(28.00 - 11.08) = 16.92$   $16.92(0.163) = 2.8$   $2.8(3) = 8.4$

Purging Device: Disposable Bailer

Sampling Device: Disposable Bailer

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Cloudy, no odor

### FIELD COMMENTS

### FIELD ANALYSIS

Temperature (°C): 10.7

Specific Conductance (µmhos/cm³): 755

pH (SU): 7.20

Collector Name: J. Saunders Affiliation: BMI

W.O. # 118292  
Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 12-13-00

Monitoring Point Identification: KMW-9

Monitoring Point Type: 2" PVC Flush Mount

Location: Inside Electrical Cage

Static Water Level (ft): 11.10

Well Depth (ft): 25.0

One Well Volume (gal): 2.3

Actual Purge Volume (gal): 8.0

( depth ) - ( swl ) = head head x conversion factor = 1 volume 1 vol. x 3 = purge volume  
conversion factor: 2" well diameter = 0.163 gal/ft 4" well diameter = 0.653 gal/ft

$(25.0 - 11.10) = 13.9$   $13.9(0.163) = 2.3$   $2.35(3) = 6.9$

Purging Device: Disposable Bailer

Sampling Device: Disposable Bailer

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Cloudy, no odor

### FIELD COMMENTS

Water in annulus over the wellcap

### FIELD ANALYSIS

Temperature (°C): 10.8

Specific Conductance (µmhos/cm³): 767

pH (SU): 7.19

Sampler Name: J. Saunders

Affiliation: BMI



W.O. # 118292  
Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 12-13-00

Monitoring Point Identification: EEIB -12

Monitoring Point Type: 2" PVC Flush Mount

Location: W of Electrical Tower

Static Water Level (ft): 11.78

Well Depth (ft): 20.0

One Well Volume (gal): 1.05

Actual Purge Volume (gal): 4.0

$(\text{depth}) - (\text{swl}) = \text{head}$      $\text{head} \times \text{conversion factor} = 1 \text{ volume}$      $1 \text{ vol.} \times 3 = \text{purge volume}$   
conversion factor: 2" well diameter = 0.163 gal/ft    4" well diameter = 0.653 gal/ft

$(20.0 - 11.78) = 8.22$      $8.22(0.163) = 1.35$      $1.35(3) = 3.9$

Purging Device: Disposable Bailer

Sampling Device: Disposable Bailer

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Cloudy, no odor

### FIELD COMMENTS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### FIELD ANALYSIS

Temperature (°C): 9.8

Specific Conductance (µmhos/cm³): 967

pH (SU): 7.08

Sampler Name: J. Saunders    Affiliation: BMI

W.O. # 118292  
Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 12-13-00

Monitoring Point Identification: KMW-5

Monitoring Point Type: 2" PVC Flush Mount

Location: Middle of Parking Lot

Static Water Level (ft): 11.20

Well Depth (ft): 19.0

One Well Volume (gal): 1.3

Actual Purge Volume (gal): 5.0

$(\text{depth}) - (\text{swl}) = \text{head}$   $\text{head} \times \text{conversion factor} = 1 \text{ volume}$   $1 \text{ vol.} \times 3 = \text{purge volume}$   
conversion factor: 2" well diameter = 0.163 gal/ft      4" well diameter = 0.653 gal/ft

$(19.0 - 11.20) = 7.8$   $7.8(0.163) = 1.3$   $1.3(3) = 3.9$

Purging Device: Disposable Bailer

Immiscible Layers?: N/A

Sampling Device: Disposable Bailer

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Cloudy, no odor

### FIELD COMMENTS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### FIELD ANALYSIS

Temperature (°C): 11.8

Specific Conductance (µmhos/cm³): 857

pH (SU): 7.19

Sampler Name: J. Saunders Affiliation: BMI

W.O. # 118292  
Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 12-13-00

Monitoring Point Identification: GZA-1

Monitoring Point Type: 2" PVC Flush Mount

Location: Near SE Corner of Parking Lot

Static Water Level (ft): 14.12

Well Depth (ft): 18.0

One Well Volume (gal): 0.6

Actual Purge Volume (gal): 3.0

$(\text{depth}) - (\text{swl}) = \text{head}$   $\text{head} \times \text{conversion factor} = 1 \text{ volume}$   $1 \text{ vol.} \times 3 = \text{purge volume}$   
conversion factor: 2" well diameter = 0.163 gal/ft      4" well diameter = 0.653 gal/ft

$(18.0 - 14.12) \times 3.9 = 15.18$   $15.18 \times 0.163 = 2.48$   $2.48 \times 3 = 7.44$

Purging Device: Disposable Bailer

Immiscible Layers?: N/A

Filtered?: N/A

Sampling Device: Disposable Bailer

Thickness: \_\_\_\_\_

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Cloudy, no odor

### FIELD COMMENTS

### FIELD ANALYSIS

Temperature (°C): 12.1

Specific Conductance (µmhos/cm³): 1081

pH (SU): 7.11

Sampler Name: J. Saunders Affiliation: BMI

W.O. # 118292  
Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 12-13-00

Monitoring Point Identification: EEIB-4

Monitoring Point Type: 2" PVC Flush Mount

Location: Near SW Corner of Parking Lot

Static Water Level (ft): 14.16

Well Depth (ft): 21.0

One Well Volume (gal): 1.16

Actual Purge Volume (gal): 5.0

$(\text{depth}) - (\text{swl}) = \text{head}$   $\text{head} \times \text{conversion factor} = 1 \text{ volume}$   $1 \text{ vol.} \times 3 = \text{purge volume}$   
conversion factor: 2" well diameter = 0.163 gal/ft      4" well diameter = 0.653 gal/ft

$(21.0) - (14.16) = 6.9$   $6.9(0.163) = 1.1$   $1.1(3) = 3.3$

Purging Device: Disposable Bailer

Sampling Device: Disposable Bailer

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Cloudy, no odor

### FIELD COMMENTS

### FIELD ANALYSIS

Temperature (°C): 10.1

Specific Conductance (µmhos/cm³): 696

pH (SU): 7.12

Sampler Name: J. Saunders Affiliation: BMI

W.O. # 118292  
Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 12-13-00

Monitoring Point Identification: System Influent

Monitoring Point Type: Spigot

Location: Treatment System Building

Static Water Level (ft): N/A

Well Depth (ft): N/A

One Well Volume (gal): N/A

Actual Purge Volume (gal): N/A

$(\text{depth}) - (\text{swl}) = \text{head}$     $\text{head} \times \text{conversion factor} = \text{volume}$     $1 \text{ vol.} \times 3 = \text{purge volume}$   
conversion factor: 2" well diameter = 0.163 gal/ft   4" well diameter = 0.653 gal/ft

Purging Device: N/A

Sampling Device: N/A

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Clear, no odor

### FIELD COMMENTS

### FIELD ANALYSIS

Temperature (°C): 13.5

Specific Conductance (µmhos/cm³): 721

pH (SU): 7.04

Sampler Name: J. Saunders Affiliation: BMI

W.O. # 118292  
Dept. # 27

## GROUNDWATER MONITORING FIELD DATA SHEET

Client: HYDROVISION, INC.

Site: Spinnaker Coatings

Date: 12-13-00

Monitoring Point Identification: System Effluent

Monitoring Point Type: 4" dia. Pipe

Location: Treatment System Building

Static Water Level (ft): N/A

Well Depth (ft): N/A

One Well Volume (gal): N/A

Actual Purge Volume (gal): N/A

$(\text{depth}) - (\text{swl}) = \text{head}$     $\text{head} \times \text{conversion factor} = \text{volume}$     $1 \text{ vol.} \times 3 = \text{purge volume}$   
conversion factor: 2" well diameter = 0.163 gal/ft   4" well diameter = 0.653 gal/ft

Purging Device: N/A

Sampling Device: N/A

Immiscible Layers?: N/A

Thickness: \_\_\_\_\_

Filtered?: N/A

Filter Type: \_\_\_\_\_

Weather Conditions: \_\_\_\_\_

Sample Appearance and Odor: Clear, no odor

### FIELD COMMENTS

### FIELD ANALYSIS

Temperature (°C): 13.5

Specific Conductance ( $\mu\text{mhos}/\text{cm}^3$ ): 703

pH (SU): 8.45

Sampler Name: J. Saunders Affiliation: BMI

**APPENDIX B**  
**ANALYTICAL RESULTS**  
**AND CHAIN-OF-CUSTODY FORMS**



**BOWSER  
MORNER®**

COMMITTED TO EXCELLENCE  
SINCE 1911

Shipping: 4518 Taylorsville Rd. Dayton, OH 45424  
Mailing: P.O.Box 51 Dayton, OH 45401-0051  
937-236-8805  
937-237-9947 FAX

## LABORATORY REPORT

TO: JOSEPH D. SAUNDERS (@ BMI)  
HYDROVISION, INC.  
7094 PEACHTREE INDUSTRIAL BLVD  
SUITE 300  
NORCROSS, GA 30371

Report Date: 12/21/00  
Job Number : 118292  
Group No. : 33558  
Sample No. : 011713  
Auth/P.O.# :

Sample Identification: EFFLUENT

Date Sampled: 12/07/00

Date Received: 12/08/00

Analysis Description	Result	Units	MRL*	Method	Date/Analyst
Total Organic Carbon	2.9	mg/L	1.0	EPA 415.1	12/14/00 drb
Solids, Suspended	72	mg/L	1.0	EPA 160.2	12/11/00 drb

Submitted by,

*Thomas M. Ryan*  
Thomas M. Ryan, Senior Chemist  
Analytical Services Division

\* MRL = Method Report Limit

def2/7968/





**BOWSER  
MORNER®**

COMMITTED TO EXCELLENCE  
SINCE 1911

Shipping: 4518 Taylorsville Rd. Dayton, OH 45424

Mailing: P.O. Box 51 Dayton, OH 45401-0051

937-236-8805

937-237-9947 FAX

## LABORATORY REPORT

TO: JOSEPH D. SAUNDERS (@ BMI)  
HYDROVISION, INC.  
7094 PEACHTREE INDUSTRIAL BLVD  
SUITE 300  
NORCROSS, GA 30371

Report Date: 12/21/00  
Job Number : 118292  
Group No. : 33558  
Sample No. : 011712  
Auth/P.O.# :

Sample Identification: INFLUENT

Date Sampled: 12/07/00

Date Received: 12/08/00

Analysis Description	Result	Units	MRL*	Method	Date/Analyst
Acenaphthene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Acenaphthylene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Anthracene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Benzo(a)Anthracene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Benzo(a)Pyrene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Benzo(b)Fluoranthene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Benzo(k)Fluoranthene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Benzo(g,h,i)Perylene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Chrysene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Dibenzo(a,h)Anthracene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Fluoranthene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Fluorene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Indeno(1,2,3-cd)Pyrene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Naphthalene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Phenanthrene	<MRL	mg/L	0.050 EPA 8100		12/19/00 drb
Pyrene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb

Submitted by,

*Thomas M. Ryan*

Thomas M. Ryan, Senior Chemist  
Analytical Services Division

\* MRL = Method Report Limit

pro1/7968/



**BOWSER  
MORNER®**

COMMITTED TO EXCELLENCE  
SINCE 1911

Shipping: 4518 Taylorsville Rd. Dayton, OH 45424  
Mailing: P.O.Box 51 Dayton, OH 45401-0051  
937-236-8805  
937-237-9947 FAX

## LABORATORY REPORT

TO: JOSEPH D. SAUNDERS (@ BMI)  
HYDROVISION, INC.  
7094 PEACHTREE INDUSTRIAL BLVD  
SUITE 300  
NORCROSS, GA 30371

Report Date: 12/21/00  
Job Number : 118292  
Group No. : 33558  
Sample No. : 011713  
Auth/P.O.# :

Sample Identification: EFFLUENT

Date Sampled: 12/07/00

Date Received: 12/08/00

Analysis Description	Result	Units	MRL*	Method	Date/Analyst
Acenaphthene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Acenaphthylene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Anthracene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Benzo(a)Anthracene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Benzo(a)Pyrene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Benzo(b)Fluoranthene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Benzo(k)Fluoranthene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Benzo(g,h,i)Perylene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Chrysene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Dibenzo(a,h)Anthracene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Fluoranthene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Fluorene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Indeno(1,2,3-cd)Pyrene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Naphthalene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Phenanthrene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb
Pyrene	<MRL	mg/L	0.0050 EPA 8100		12/19/00 drb

Submitted by,

*Thomas M. Ryan*

Thomas M. Ryan, Senior Chemist  
Analytical Services Division

\* MRL = Method Report Limit

prol/7968/



**BOWSER  
MORNER®**

COMMITTED TO EXCELLENCE  
SINCE 1911

Shipping: 4518 Taylorsville Rd. Dayton, OH 45424

Mailing: P.O.Box 51 Dayton, OH 45401-0051

937-236-8805

937-237-9947 FAX

## LABORATORY REPORT

TO: JOSEPH D. SAUNDERS (@ BMI)  
HYDROVISION, INC.  
7094 PEACHTREE INDUSTRIAL BLVD  
SUITE 300  
NORCROSS, GA 30371

Report Date: 12/21/00  
Job Number : 118292  
Group No. : 33558  
Sample No. : 011712  
Auth/P.O.# :

Sample Identification: INFLUENT

Date Sampled: 12/07/00

Date Received: 12/08/00

Analysis Description	Result	Units	MRL*	Method	Date/Analyst
Acetone	<MRL	mg/L	0.020	EPA 8260B	12/13/00 drb
Acrolein	----	ug/L	100.0	EPA 8260B	12/13/00 drb
Acrylonitrile	----	ug/L	100.0	EPA 8260B	12/13/00 drb
Benzene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Bromodichloromethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Bromoform	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Bromomethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Carbon disulfide	<MRL	mg/L	0.010	EPA 8260B	12/13/00 drb
Carbon tetrachloride	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Chlorobenzene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Chloroethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
2-Chloroethylvinyl ether	<MRL	mg/L	0.010	EPA 8260B	12/13/00 drb
Chloroform	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Chloromethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Chlorodibromomethane	----	ug/L	5.0	EPA 8260B	12/13/00 drb
Dibromomethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,4-Dichlorobenzene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
cis-1,3 Dichloropropene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
trans-1,3- Dichloropropene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Dichlorodifluoromethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,1-Dichloroethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,2-Dichloroethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,1-Dichloroethene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
trans-1,2-Dichloroethene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,2-Dichloropropane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Ethylbenzene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
2-Hexanone (MBK)	<MRL	mg/L	0.020	EPA 8260B	12/13/00 drb
2-Butanone (MEK)	<MRL	mg/L	0.020	EPA 8260B	12/13/00 drb
4-Methyl-2-pentanone (MIBK)	<MRL	mg/L	0.020	EPA 8260B	12/13/00 drb
Methylene Chloride	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb

Submitted by,

*Thomas M. Ryan*

Thomas M. Ryan, Senior Chemist  
Analytical Services Division

\* MRL = Method Report Limit

pro1/7968/



**BOWSER  
MORNER®**

COMMITTED TO EXCELLENCE  
SINCE 1911

Shipping: 4518 Taylorsville Rd. Dayton, OH 45424  
Mailing: P.O.Box 51 Dayton, OH 45401-0051  
937-236-8805  
937-237-9947 FAX

## LABORATORY REPORT

TO: JOSEPH D. SAUNDERS (@ BMI)  
HYDROVISION, INC.  
7094 PEACHTREE INDUSTRIAL BLVD  
SUITE 300  
NORCROSS, GA 30371

Report Date: 12/21/00  
Job Number : 118292  
Group No. : 33558  
Sample No. : 011712  
Auth/P.O.# :

Sample Identification: INFLUENT

Date Sampled: 12/07/00

Date Received: 12/08/00

Analysis Description	Result	Units	MRL*	Method	Date/Analyst
Styrene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,1,2,2-Tetrachloroethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Tetrachloroethene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Toluene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,1,1-Trichloroethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,1,2-Trichloroethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Trichloroethene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Trichlorofluoromethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,2,3-Trichloropropane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Vinyl Acetate	<MRL	mg/L	0.010	EPA 8260B	12/13/00 drb
Vinyl Chloride	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Xylenes (total)	<MRL	mg/L	0.010	EPA 8260B	12/13/00 drb
cis - 1,2 Dichloroethene	<MRL	mg/L	0.005	EPA 8260B	12/13/00 drb

Submitted by,

*Thomas M. Ryan*

Thomas M. Ryan, Senior Chemist  
Analytical Services Division

\* MRL = Method Report Limit

prol/7968/



**BOWSER  
LORNER®**

COMMITTED TO EXCELLENCE  
SINCE 1911

Shipping: 4518 Taylorsville Rd. Dayton, OH 45424

Mailing: P.O. Box 51 Dayton, OH 45401-0051

937-236-8805

937-237-9947 FAX

## LABORATORY REPORT

TO: JOSEPH D. SAUNDERS (@ BMI)  
HYDROVISION, INC.  
7094 PEACHTREE INDUSTRIAL BLVD  
SUITE 300  
NORCROSS, GA 30371

Report Date: 12/21/00  
Job Number : 118292  
Group No. : 33558  
Sample No. : 011713  
Auth/P.O.# :

Sample Identification: EFFLUENT

Date Sampled: 12/07/00

Date Received: 12/08/00

Analysis Description	Result	Units	MRL*	Method	Date/Analyst
Acetone	<MRL	mg/L	0.020	EPA 8260B	12/13/00 drb
Acrolein	----	ug/L	100.0	EPA 8260B	12/13/00 drb
Acrylonitrile	----	ug/L	100.0	EPA 8260B	12/13/00 drb
Benzene	<MRL	mg/L	0.025	EPA 8260B	12/13/00 drb
Bromodichloromethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Bromoform	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Bromomethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Carbon disulfide	<MRL	mg/L	0.010	EPA 8260B	12/13/00 drb
Carbon tetrachloride	<MRL	mg/L	0.050	EPA 8260B	12/13/00 drb
Chlorobenzene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Chloroethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
2-Chloroethylvinyl ether	<MRL	mg/L	0.010	EPA 8260B	12/13/00 drb
Chloroform	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Chloromethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Chlorodibromomethane	----	ug/L	5.0	EPA 8260B	12/13/00 drb
Dibromomethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,4-Dichlorobenzene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
cis-1,3-Dichloropropene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
trans-1,3-Dichloropropene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Dichlorodifluoromethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,1-Dichloroethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,2-Dichloroethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,1-Dichloroethene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
trans-1,2-Dichloroethene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,2-Dichloropropane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Ethylbenzene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
2-Hexanone (MBK)	<MRL	mg/L	0.020	EPA 8260B	12/13/00 drb
2-Butanone (MEK)	<MRL	mg/L	0.020	EPA 8260B	12/13/00 drb
4-Methyl-2-pentanone (MIBK)	<MRL	mg/L	0.020	EPA 8260B	12/13/00 drb
Methylene Chloride	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb

Submitted by,

*Thomas M. Ryan*

Thomas M. Ryan, Senior Chemist  
Analytical Services Division

MRL = Method Report Limit

prol/7968/



**BOWSER  
MORNER®**

COMMITTED TO EXCELLENCE  
SINCE 1911

Shipping: 4518 Taylorsville Rd. Dayton, OH 45424  
Mailing: P.O.Box 51 Dayton, OH 45401-0051  
937-236-8805  
937-237-9947 FAX

## LABORATORY REPORT

TO: JOSEPH D. SAUNDERS (@ BMI)  
HYDROVISION, INC.  
7094 PEACHTREE INDUSTRIAL BLVD  
SUITE 300  
NORCROSS, GA 30371

Report Date: 12/21/00  
Job Number : 118292  
Group No. : 33558  
Sample No. : 011713  
Auth/P.O.# :

Sample Identification: EFFLUENT

Date Sampled: 12/07/00

Date Received: 12/08/00

Analysis Description	Result	Units	MRL*	Method	Date/Analyst
Styrene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,1,2,2-Tetrachloroethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Tetrachloroethene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Toluene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,1,1-Trichloroethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,1,2-Trichloroethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Trichloroethene	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Trichlorofluoromethane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
1,2,3-Trichloropropane	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Vinyl Acetate	<MRL	mg/L	0.010	EPA 8260B	12/13/00 drb
Vinyl Chloride	<MRL	mg/L	0.0050	EPA 8260B	12/13/00 drb
Xylenes (total)	<MRL	mg/L	0.010	EPA 8260B	12/13/00 drb
cis - 1,2 Dichloroethene	<MRL	mg/L	0.005	EPA 8260B	12/13/00 drb

Submitted by,

*Thomas M. Ryan*

Thomas M. Ryan, Senior Chemist  
Analytical Services Division

\* MRL = Method Report Limit

pro1/7968/



**BOWSER  
MORNER®**

**CORPORATE OFFICE**

Shipping Address:  
4518 Taylorsville Road  
Dayton, OH 45424  
Phone (937) 236-8805  
Fax (937) 237-9947

**CHAIN OF CUSTODY RECORD**

**DISTRICT OFFICES**

Shipping Address:  
122 S. St. Clair St.  
Toledo, OH 43602  
Phone (419) 255-8200  
Fax (419) 255-7935

2416-B Over Drive  
Lexington, KY 40510  
Phone (606) 233-0250  
Fax (606) 253-0183

<b>BILL TO:</b>				<b>MAIL TO:</b>				<b>COPY TO:</b>						
Dept. 27				Dept. 27				J. Saunders						
ZIP				ZIP				ZIP						
Phone ( ) Attn:				Phone ( ) Attn:				Phone ( ) Attn:						
<b>JOB NO.</b>		<b>PROJECT NAME/COMPANY</b>						<b>PRESERVATIVE</b>		<b>PURCHASE ORDER NO.:</b>				
118292		Hydrovision												
<b>SAMPLER: (Signature)</b>										<b>QUOTATION NO.:</b>				
Joseph A. Saunders										<b>CLIENT ACCOUNT ID:</b>				
Phone ( )														
<b>BM Sample No.</b>	<b>Sample</b>			<b>Composite</b>	<b>Grab</b>	<b>Sample Location/Description</b>	<b>CONTAINERS</b>		<b>Sulfuric Acid</b>	<b>Nitric Acid</b>	<b>Hydrochloric Acid</b>	<b>Sodium Hydroxide</b>	<b>Ice-None</b>	
	<b>Date</b>	<b>Time</b>	<b>Type</b>				<b>No.</b>	<b>Type</b>						
	12/7/00	11:40	Water		X	Influent	2	40ml			X			VOC-Method 8260*
						"	1	1L					X	PAH-Method 8100
		11:50				Effluent	2	40ml			X			VOC-Method 8260*
							1	1L	X					TOL
							1	1L					X	TSS
							1	1L					X	PAH
						Client Code	7968							
						CO#	118292							
						Group#	33558							
						Sample#(s)	Q11712-Q11713							
<b>LIST OF ANALYSIS / COMMENTS</b>														
* Incl. cis-1,2 dichloroethane														

1. Relinquished by: (Signature)		Date/Time		1. Received by: (Signature)		Date/Time		2. Relinquished by: (Signature)		Date/Time		2. Received by: (Signature)	
Joseph A. Saunders		12/7/00 5:58											
3. Relinquished by: (Signature)		Date/Time		3. Received by: (Signature)		Date/Time		4. Relinquished by: (Signature)		Date/Time		4. Received by: (Signature)	
5. Relinquished by: (Signature)		Date/Time		Received by Laboratory		Date/Time		Cooler No.		Cooler Temp °C		Notes:	
				[Signature]		12/1/00							

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: C0-12301

Received: 12 DEC 00

Reported: 27 DEC 00

Mr. Steve McFadden  
HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: BROWN-BRIDGE/SPINNAKER COATINGS

Sampled By: Client

Code: 080401227

Page 1

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
12301-1	KMW-6	12-11-00/09:40
PARAMETER	12301-1	
Aromatic and Halogenated Volatiles (8021)		
Benzene, ug/l		<1.0
Bromobenzene, ug/l		<3.0
Bromodichloromethane, ug/l		<1.0
Bromoform, ug/l		<2.0
Bromomethane (Methyl bromide), ug/l		<2.0
Carbon tetrachloride, ug/l		<1.0
Chlorobenzene, ug/l		<1.0
Chloroethane, ug/l		<5.0
2-Chloroethylvinyl ether, ug/l		<5.0
Chloroform, ug/l		<2.0
Chloromethane, ug/l		<5.0
Dibromochloromethane, ug/l		<5.0
Dibromomethane (Methylene bromide), ug/l		<5.0
1,2-Dichlorobenzene, ug/l		<2.0
1,3-Dichlorobenzene, ug/l		<2.0
1,4-Dichlorobenzene, ug/l		<2.0
Dichlorodifluoromethane, ug/l		<5.0
1,1-Dichloroethane, ug/l		<1.0
1,2-Dichloroethane, ug/l		<1.0
1,1-Dichloroethene, ug/l		<1.0
cis-1,2-Dichloroethene, ug/l		<1.0
trans-1,2-Dichloroethene, ug/l		<1.0
1,2-Dichloroethene (total), ug/l		<1.0
1,2-Dichloropropane, ug/l		<1.0
cis-1,3-Dichloropropene, ug/l		<1.0



SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: - C0-12301

Received: 12 DEC 00

Reported: 27 DEC 00

Mr. Steve McFadden  
HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: BROWN-BRIDGE/SPINNAKER COATINGS

Sampled By: Client

Code: 080401227

Page 2

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
12301-1	KMW-6	12-11-00/09:40
PARAMETER	12301-1	
trans-1,3-Dichloropropene, ug/l	<1.0	
Ethylbenzene, ug/l	<1.0	
Methylene chloride (Dichloromethane), ug/l	<5.0	
Methyl t-butyl ether (MTBE), ug/l	<5.0	
1,1,1,2-Tetrachloroethane, ug/l	<1.0	
1,1,2,2-Tetrachloroethane, ug/l	<1.0	
Tetrachloroethene, ug/l	<3.0	
Toluene, ug/l	<5.0	
1,1,1-Trichloroethane, ug/l	<1.0	
1,1,2-Trichloroethane, ug/l	<2.0	
Trichloroethene, ug/l	<1.0	
Trichlorofluoromethane, ug/l	<2.0	
1,2,3-Trichloropropane, ug/l	<5.0	
Vinyl chloride, ug/l	<1.0	
Xylenes, Total, ug/l	<2.0	
Surrogate - 4-Bromofluorobenzene (PID), ug/l	105 %	
Surrogate - 4-Bromofluorobenzene (ELCD), ug/l	114 %	
Dilution Factor	1	
Analysis Date	12.21.00	
Batch ID	PHW161	
Prep Method	5030	
Analyst	CP	

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: - C0-12301

Received: 12 DEC 00

Reported: 27 DEC 00

Mr. Steve McFadden  
HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: BROWN-BRIDGE/SPINNAKER COATINGS

Sampled By: Client

Code: 080401227

Page 3

## REPORT OF RESULTS

DATE/

TIME SAMPLED

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES		
12301-2	Method Blank		
12301-3	Lab Control Standard % Recovery		
PARAMETER		12301-2	12301-3
Aromatic and Halogenated Volatiles (8021)			
Benzene, ug/l		<1.0	104 %
Bromobenzene, ug/l		<3.0	---
Bromodichloromethane, ug/l		<1.0	---
Bromoform, ug/l		<2.0	---
Bromomethane (Methyl bromide), ug/l		<2.0	---
Carbon tetrachloride, ug/l		<1.0	---
Chlorobenzene, ug/l		<1.0	100 %
Chloroethane, ug/l		<5.0	---
2-Chloroethylvinyl ether, ug/l		<5.0	---
Chloroform, ug/l		<2.0	---
Chloromethane, ug/l		<5.0	---
Dibromochloromethane, ug/l		<5.0	---
Dibromomethane (Methylene bromide), ug/l		<5.0	---
1,2-Dichlorobenzene, ug/l		<2.0	---
1,3-Dichlorobenzene, ug/l		<2.0	---
1,4-Dichlorobenzene, ug/l		<2.0	---
Dichlorodifluoromethane, ug/l		<5.0	---
1,1-Dichloroethane, ug/l		<1.0	---
1,2-Dichloroethane, ug/l		<1.0	---
1,1-Dichloroethene, ug/l		<1.0	122 %
cis-1,2-Dichloroethene, ug/l		<1.0	---
trans-1,2-Dichloroethene, ug/l		<1.0	---
1,2-Dichloroethene (total), ug/l		<1.0	---
1,2-Dichloropropane, ug/l		<1.0	---

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: C0-12301

Received: 12 DEC 00

Reported: 27 DEC 00

Mr. Steve McFadden  
HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: BROWN-BRIDGE/SPINNAKER COATINGS

Sampled By: Client

Code: 080401227

Page 4

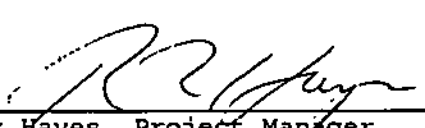
## REPORT OF RESULTS

LOG NO      SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES      DATE/  
TIME SAMPLED

12301-2      Method Blank  
12301-3      Lab Control Standard % Recovery

PARAMETER	12301-2	12301-3
cis-1,3-Dichloropropene, ug/l	<1.0	---
trans-1,3-Dichloropropene, ug/l	<1.0	---
Ethylbenzene, ug/l	<1.0	---
Methylene chloride (Dichloromethane), ug/l	<5.0	---
Methyl t-butyl ether (MTBE), ug/l	<5.0	---
1,1,1,2-Tetrachloroethane, ug/l	<1.0	---
1,1,2,2-Tetrachloroethane, ug/l	<1.0	---
Tetrachloroethene, ug/l	<3.0	---
Toluene, ug/l	<5.0	102 %
1,1,1-Trichloroethane, ug/l	<1.0	---
1,1,2-Trichloroethane, ug/l	<2.0	---
Trichloroethene, ug/l	<1.0	110 %
Trichlorofluoromethane, ug/l	<2.0	---
1,2,3-Trichloropropane, ug/l	<5.0	---
Vinyl chloride, ug/l	<1.0	---
Xylenes, Total, ug/l	<2.0	---
Surrogate - 4-Bromofluorobenzene (PID), ug/l	105 %	95 %
Surrogate - 4-Bromofluorobenzene (ELCD), ug/l	118 %	106 %
Dilution Factor	1	1
Analysis Date	12.20.00	12.20.00
Batch ID	PHW161	PHW161
Prep Method	5030	5030
Analyst	CP	CP

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

  
Rick Hayes, Project Manager

**SEVERN TRENT LABORATORIES, INC. - PENSACOLA, FLORIDA  
STATE CERTIFICATIONS**

*Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)*

*Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)*

*Arkansas Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental)*

*State of California, Department of Health Services, Laboratory ID No. 2338 (Hazardous Waste and Wastewater)*

*State of Connecticut, Department of Health Services, Connecticut Lab Approval No. PH-0697 (Drinking Water, Hazardous Waste and Wastewater)*

*Delaware Health & Social Services, Division of Public Health, Laboratory ID No. FL094 (Drinking Water by Reciprocity with FL)*

*Florida DOH Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater)*

*Florida, Radioactive Materials License No. G0733-1*

*Foreign Soil Permit, Permit No. S-37599*

*Kansas Department of Health & Environment, Laboratory ID No. E10253 (Wastewater and Hazardous Waste)*

*Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Laboratory ID No. 90043 (Drinking Water)*

*State of Louisiana, DHH, Office of Public Health Division of Laboratories, Laboratory ID No. LA000017 (Drinking Water)*

*Louisiana Department of Environmental Quality, Environmental Laboratory Accreditation Program, Agency Interest ID 30748 (Environmental - Accreditation Pending)*

*State of Maryland, DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)*

*Commonwealth of Massachusetts, DEP, Laboratory ID No. M-FL094 (Hazardous Waste and Wastewater)*

*State of Michigan, Bureau of E&OcH, Laboratory ID No. 9912 (Drinking Water by Reciprocity with Florida)*

*New Hampshire DES ELAP, Laboratory ID No. 250599A (Wastewater)*

*State of New Jersey, Department of Environmental Protection & Energy, Laboratory ID No. 49006 (Wastewater and Hazardous Waste)*

*New York State, Department of Health, Laboratory ID No. 11503 (Wastewater and Solids/Hazardous Waste)*

*North Carolina Department of Environment & Natural Resources, Laboratory ID No. 314 (Hazardous Waste and Wastewater)*

*North Dakota DH&Consol Labs, Laboratory ID No. R-108 (Drinking Water, Wastewater and Hazardous Waste by Reciprocity with Florida)*

*State of Oklahoma, Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)*

*Commonwealth of Pennsylvania, Department of Environmental Resources, Laboratory ID No. 68-467 (Drinking Water)*

*South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater by Reciprocity with FL and Solids/Hazardous Waste by Reciprocity with CA)*

*Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)*

*Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)*

*State of Washington, Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater)*

*West Virginia Division of Environmental Protection, Office of Water Resources, Laboratory ID No. 136 (Hazardous Waste and Wastewater by Reciprocity with FL)*

*American Industrial Hygiene Association (AIHA) Accredited Laboratory, Laboratory ID No. 100704*

## Data Qualifiers for Final Report

## STL-Pensacola Inorganic/Organic

## STL Pensacola

B1	The analyte was detected in the associated method blank (sample itself is flagged even though sample is ND).
B2	The analyte was detected in the sample(s) and in the associated method blank analyzed on the day samples were extruded; however, this analyte was not detected in the blank analyzed with the samples.
B3	The analyte was found in the associated blank as well as in the associated sample(s) (qualifier is applied to the sample, not to the blank).
B4	Sample results were corrected due to contaminants in Fractionation Blank
D	Diluted out (surrogate or spike due to sample dilution)
E	Compound concentration exceeds the upper calibration range of the instrument.
F	The reported value is < STL-Pensacola RL and > the STL-Pensacola MDL; therefore, the quantitation is estimation (The STL-PN RL is at or above lowest calibration standard in the initial calibration curve).
G	Sample and/or duplicate result is at or below 5 X (times) the STL Reporting Limit and the absolute difference between the sample and duplicate result is at or below the STL reporting limit; therefore, the results are "in control".
H1	Sample and/or duplicate is below 5 X (times) the STL Reporting Limit and the absolute difference between the results exceeds the STL Reporting Limit; therefore, the results are "out of control"
H2	Sample and duplicate (or MS and MSD) RPD is above control limit.
J (description)	The analyte was positively identified, the quantitation may be an estimation
J4	(For positive results) Temperature limits exceeded ( $< 2^{\circ}\text{C}$ or $> 6^{\circ}\text{C}$ ); non-reportable for NPDES compliance monitoring.
J6	(For positive results) LCS or Surrogate %R is > upper control limit (UCL), results may be biased high
J7	The reported value is > the laboratory MDL and < lowest calibration standard; therefore, the quantitation is an estimation (this qualifier should only be used when the STL-PN RL is below the lowest calibration standard in the initial calibration).
J8	Matrix spike and post spike recoveries are outside control limits. See out of Control Events/Corrective Action Form.
J9	(For positive results) LCS or Surrogate %R is < lower control limit (LCL), results may be biased low
M1	A matrix effect was present ( <sup>1</sup> sample, MS or MSD was analyzed twice to confirm surrogate/spike failure, <sup>2</sup> sample and/or MS/MSD chromatogram(s) had interfering peaks, <sup>3</sup> sample result was > 4 X spike added, <sup>4</sup> metals serial dilution was performed, or <sup>5</sup> metals post spike is < 40% R)
M2	The MS and/or MSD %R or RPD was outside upper or lower control limits; not necessarily due to matrix effect.
N/C	Not Calculable; Sample spiked is > 4X spike concentration (may also use this flag in place of negative numbers)
NH	Sample and duplicate results are "out of control". The sample is nonhomogeneous.
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)
Q	The analytical (post digestion) spike is reported due to the percent recovery being outside limits on the matrix (pre-digestion) spike.
R (description)	The data may be unusable due to deficiencies in the ability to analyze the sample and meet QC criteria
R1	(For nondetects) Temperature limits exceeded ( $< 2^{\circ}\text{C}$ or $> 6^{\circ}\text{C}$ ); non-reportable for NPDES compliance monitoring
R2	Improper preservation, no preservative present or insufficient amounts of preservative in sample upon receipt, non-reportable for NPDES compliance monitoring
R3	Improper preservation, incorrect preservative present in sample upon receipt, non-reportable for NPDES compliance
R4	Holding time exceeded, non-reportable for NPDES compliance monitoring.
R5	Collection requirements not met, improper container used for sample
R6	LCS or surrogate %R is < LCL and analyte is not detected or surrogate %R is < 10% for detects/nondetects.
R7	Internal standard area outside -50% to +100% of calibration verification standard.
R8	Initial calibration or any calibration verification exceeds acceptance criteria.
R9	Not filtered and preserved at time of collection.
R10	Headspace > 1/4" in diameter in volatile vials, non-reportable for NPDES compliance monitoring
R11	Samples were filtered and preserved within 4 hours of collection.
R12	Analysis performed outside the 12-hour tune or not within tune criteria.
S1	The Method of Standard Additions (MSA) has been performed on this sample.
S2	Incorrect sample amount was submitted to the laboratory for analysis
S3 (Flashpoint)	This method is not designed for solids and the results may not be accepted by any regulator for such purposes.
T	Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound.
TIC	The compound is not within the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound.
U	The reported value is < Laboratory MDL (value for result will be the MDL, never below the MDL)
W	Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance.
@	Adjusted reporting limit due to sample composition, not due to overcal (dilution prior to digestion and/or analysis).
#	Elevated reporting limit due to insufficient sample size
1 pt	The compound has been quantitated against a one point calibration.
* (Metals & Wet Chem)	Elevated reporting limit due to matrix interference (dilution prior to digestion and/or analysis)

# STL Pensacola PROJECT SAMPLE INSPECTION FORM

**SEVERN  
TRENT  
SERVICES**

Lab Order #: C012301 Date Received: 12-12-00

- |   |  |
|---|--|
| <p>1. Was there a Chain of Custody? <input checked="" type="radio"/> Yes No*</p> <p>2. Was Chain of Custody properly filled out and relinquished? <input checked="" type="radio"/> Yes No*</p> <p>3. Were samples received cold? <input checked="" type="radio"/> Yes No* N/A<br/>(Criteria: 2° - 6°C: STL-SOP)</p> <p>4. Were all samples properly labeled and identified? <input checked="" type="radio"/> Yes No*</p> <p>5. Did samples require splitting or compositing? Yes* <input checked="" type="radio"/> No<br/>Req By: PM Client Other*</p> <p>6. Were samples received in proper containers for analysis requested? <input checked="" type="radio"/> Yes No*</p> <p>7. Were all sample containers received intact? <input checked="" type="radio"/> Yes No*</p> | <p>8. Were samples checked for preservative? (Check pH of all H<sub>2</sub>O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace) Yes No* <input checked="" type="radio"/> N/A</p> <p>9. Is there sufficient volume for analysis requested? <input checked="" type="radio"/> Yes No* N/A (Gen)</p> <p>10. Were samples received within Holding Time? (REFER TO STL-SOP 1040) <input checked="" type="radio"/> Yes No*</p> <p>11. Is Headspace visible &gt; ¼" in diameter in VOA vials? * If any headspace is evident, comment in out-of-control section. Yes* <input checked="" type="radio"/> No N/A</p> <p>12. If sent, were matrix spike bottles returned? Yes No* <input checked="" type="radio"/> N/A</p> <p>13. Was Project Manager notified of problems? (initials: _____) Yes No* <input checked="" type="radio"/> N/A</p> |
|---|--|

Airbill Number(s): 8159361221

Shipped By: AIRBORNE

Cooler Number(s): CLIENT

Shipping Charges: N/A

Cooler Weight(s): 5 lbs

Cooler Temp(s) (°C): 5°  
CCKL  
(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

## Out of Control Events and Inspection Comments:

---

---

---

---

---

---

---

---

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: JJ Date: 12-12-00 Logged By: RKC Date: 12/12/00

- \* Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples (pH, Dissolved O<sub>2</sub>, Residual Cl) as out of hold time, therefore, these samples will not be documented on this PSIF.
- \* If Other, note who requested the splitting or compositing of samples on the Comment Section of this form. All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"
- \* All preservatives for the State of North Carolina, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (STL-SOP 938, section 2.2.9).
- \* According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, STL makes it policy to record any headspace as out-of-control (STL-SOP 938, section 2.2.12).



**BOWSER  
MORNER**

**CORPORATE OFFICE**

Shipping Address:  
4518 Taylorsville Road  
Dayton, OH 45424  
Phone (937) 236-8805  
Fax (937) 237-9947

**CHAIN OF CUSTODY RECORD**

*C012301*

**DISTRICT OFFICES**

Shipping Address:  
122 S. St. Clair St.  
Toledo, OH 43602  
Phone (419) 255-8200  
Fax (419) 255-7935

2416-B Over Drive  
Lexington, KY 40510  
Phone (606) 233-0250  
Fax (606) 253-0183

BILL TO: <i>Hydromediation, Inc.</i>				MAIL TO: <i>Same</i>				COPY TO:						
7094 Peachtree Industrial Blvd. Ste. 300														
Northcross, GA ZIP 30071														
Phone (770) 446-5445 Attn: S. McFadden				Phone ( ) Attn:				Phone ( ) Attn:						
JOB NO.		PROJECT NAME/COMPANY						PRESERVATIVE		PURCHASE ORDER NO.:				
		<i>Brown Bridge/Spinneret Coatings</i>												
SAMPLER: (Signature)		Phone (937) 236-8805 ext. 258								QUOTATION NO.:				
<i>Joseph D. Saunders</i>										CLIENT ACCOUNT ID:				
BM Sample No.	Sample			Composite	Grab	Sample Location/Description	CONTAINERS		Sulfuric Acid	Nitric Acid	Hydrochloric Acid	Sodium Hydroxide	Ice-None	LIST OF ANALYSIS / COMMENTS
	Date	Time	Type				No.	Type						
1	12/1/00	9:40	G-W		A	KMW-6	2	10 ml			X			<i>Vol - Mc Hyd 8020</i>
1. Relinquished by: (Signature)		Date/Time		1. Received by: (Signature)		Date/Time		2. Relinquished by: (Signature)		Date/Time		2. Received by: (Signature)		
<i>Joseph D. Saunders</i>		12/1/00 3:00		<i>Julie Johnson</i> 12/1/00 3:10 PM										
3. Relinquished by: (Signature)		Date/Time		3. Received by: (Signature)		Date/Time		4. Relinquished by: (Signature)		Date/Time		4. Received by: (Signature)		
5. Relinquished by: (Signature)		Date/Time		Received by Laboratory		Date/Time		Cooler No.		Cooler Temp °C		Notes:		

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: - C0-12369

Received: 15 DEC 00

Reported: 29 DEC 00

Mr. Steve McFadden  
HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: BROWN-BRIDGE/SPINNAKER COATINGS

Sampled By: Client

Code: 133101229

Page 1

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED			
12369-1	KMW-5	12-13-00/12:15			
12369-2	EEIB-4	12-13-00/14:45			
12369-3	EEIB-2	12-13-00/13:45			
12369-4	PW-2	12-13-00/14:00			
12369-5	PW-3	12-13-00/14:15			
PARAMETER	12369-1	12369-2	12369-3	12369-4	12369-5
Aromatic and Halogenated					
Volatiles (8021)					
Benzene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Bromobenzene, ug/l	<3.0	<3.0	<3.0	<3.0	<3.0
Bromodichloromethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform, ug/l	<2.0	<2.0	<2.0	<2.0	<2.0
Bromomethane (Methyl bromide), ug/l	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon tetrachloride, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
2-Chloroethylvinyl ether, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform, ug/l	<2.0	<2.0	<2.0	<2.0	<2.0
Chloromethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Dibromochloromethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Dibromomethane (Methylene bromide), ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene, ug/l	<2.0	<2.0	<2.0	<2.0	<2.0
1,3-Dichlorobenzene, ug/l	<2.0	<2.0	<2.0	<2.0	<2.0
1,4-Dichlorobenzene, ug/l	<2.0	<2.0	<2.0	<2.0	<2.0
Dichlorodifluoromethane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane, ug/l	1.8	<1.0	<1.0	<1.0	14



SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: C0-12369

Received: 15 DEC 00

Reported: 29 DEC 00

Mr. Steve McFadden  
HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: BROWN-BRIDGE/SPINNAKER COATINGS

Sampled By: Client

Code: 133101229

Page 2

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED			
12369-1	KMW-5	12-13-00/12:15			
12369-2	EEIB-4	12-13-00/14:45			
12369-3	EEIB-2	12-13-00/13:45			
12369-4	PW-2	12-13-00/14:00			
12369-5	PW-3	12-13-00/14:15			
PARAMETER	12369-1	12369-2	12369-3	12369-4	12369-5
1,2-Dichloroethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene, ug/l	2.5	35	1.9	<1.0	52
trans-1,2-Dichloroethene, ug/l	<1.0	<1.0	<1.0	<1.0	1.2
1,2-Dichloroethene (total), ug/l	2.5	35	1.9	<1.0	53
1,2-Dichloropropane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene, ug/l	<1.0	<1.0	1.1	<1.0	<1.0
Ethylbenzene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride (Dichloromethane), ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-butyl ether (MTBE), ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,1,2-Tetrachloroethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene, ug/l	8.1	74	<3.0	<3.0	<3.0
Toluene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,1-Trichloroethane, ug/l	3.4	<1.0	<1.0	<1.0	9.9
1,1,2-Trichloroethane, ug/l	<2.0	<2.0	<2.0	<2.0	<2.0
Trichloroethene, ug/l	2.9	3.4	<1.0	<1.0	9.5
Trichlorofluoromethane, ug/l	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,3-Trichloropropane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride, ug/l	<1.0	<1.0	<1.0	<1.0	8.0R8

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: C0-12369

Received: 15 DEC 00

Reported: 29 DEC 00

Mr. Steve McFadden  
 HydroVision, Inc.  
 7094 Peachtree Executive Park Suite 300  
 Norcross, GA 30071

Project: BROWN-BRIDGE/SPINNAKER COATINGS

Sampled By: Client

Code: 133101229

Page 3

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES					DATE/ TIME SAMPLED
12369-1	KMW-5					12-13-00/12:15
12369-2	EEIB-4					12-13-00/14:45
12369-3	EEIB-2					12-13-00/13:45
12369-4	PW-2					12-13-00/14:00
12369-5	PW-3					12-13-00/14:15
PARAMETER	12369-1	12369-2	12369-3	12369-4	12369-5	
Xylenes, Total, ug/l	<2.0	<2.0	<2.0	<2.0	<2.0	
Surrogate - 4-Bromofluorobenzene (PID), ug/l	104 %	104 %	105 %	106 %	108 %	
Surrogate - 4-Bromofluorobenzene (ELCD), ug/l	115 %	115 %	116 %	118 %	120 %	
Dilution Factor	1	1	1	1	1	
Analysis Date	12.23.00	12.23.00	12.23.00	12.26.00	12.26.00	
Batch ID	PHW162	PHW162	PHW163	PHW164	PHW164	
Prep Method	5030	5030	5030	5030	5030	
Analyst	CP	CP	CP	CP	CP	

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: - C0-12369

Received: 15 DEC 00

Reported: 29 DEC 00

Mr. Steve McPadden  
HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: BROWN-BRIDGE/SPINNAKER COATINGS

Sampled By: Client

Code: 133101229

Page 4

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED				
12369-6	PW-4	12-13-00/14:30				
12369-7	GZA-1	12-13-00/12:50				
12369-8	PW-1	12-13-00/09:40				
12369-9	KMW-7	12-13-00/13:35				
12369-10	KMW-8	12-13-00/11:00				
PARAMETER		12369-6	12369-7	12369-8	12369-9	12369-10
Aromatic and Halogenated						
Volatiles (8021)						
Benzene, ug/l		<1.0	<1.0	<1.0	<1.0	<1.0
Bromobenzene, ug/l		<3.0	<3.0	<3.0	<3.0	<3.0
Bromodichloromethane, ug/l		<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform, ug/l		<2.0	<2.0	<2.0	<2.0	<2.0
Bromomethane (Methyl bromide), ug/l		<2.0	<2.0	<2.0	<2.0	<2.0
Carbon tetrachloride, ug/l		<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene, ug/l		<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane, ug/l		<5.0	<5.0	<5.0	<5.0	<5.0
2-Chloroethylvinyl ether, ug/l		<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform, ug/l		<2.0	<2.0	<2.0	<2.0	<2.0
Chloromethane, ug/l		<5.0	<5.0	<5.0	<5.0	<5.0
Dibromochloromethane, ug/l		<5.0	<5.0	<5.0	<5.0	<5.0
Dibromomethane (Methylene bromide), ug/l		<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene, ug/l		<2.0	<2.0	<2.0	<2.0	<2.0
1,3-Dichlorobenzene, ug/l		<2.0	<2.0	<2.0	<2.0	<2.0
1,4-Dichlorobenzene, ug/l		<2.0	<2.0	<2.0	<2.0	<2.0
Dichlorodifluoromethane, ug/l		<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane, ug/l		1.4	<1.0	<1.0	<1.0	<1.0

Mr. Steve McFadden  
HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: BROWN-BRIDGE/SPINNAKER COATINGS

Sampled By: Client

Code: 133101229

Page 5

# REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED			
12369-6	PW-4	12-13-00/14:30			
12369-7	GZA-1	12-13-00/12:50			
12369-8	PW-1	12-13-00/09:40			
12369-9	KMW-7	12-13-00/13:35			
12369-10	KMW-8	12-13-00/11:00			
PARAMETER	12369-6	12369-7	12369-8	12369-9	12369-10
1,2-Dichloroethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene, ug/l	18	<1.0	<1.0	<1.0	5.5
trans-1,2-Dichloroethene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (total), ug/l	18	<1.0	<1.0	<1.0	5.5
1,2-Dichloropropane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride (Dichloromethane), ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl t-butyl ether (MTBE), ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,1,2-Tetrachloroethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene, ug/l	<3.0	40	<3.0	25	<3.0
Toluene, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,1-Trichloroethane, ug/l	<1.0	1.9	<1.0	<1.0	<1.0
1,1,2-Trichloroethane, ug/l	<2.0	<2.0	<2.0	<2.0	<2.0
Trichloroethene, ug/l	2.6	2.2	<1.0	2.4	<1.0
Trichlorofluoromethane, ug/l	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,3-Trichloropropane, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride, ug/l	3.7R8	<1.0	<1.0	<1.0	<1.0

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: C0-12369

Received: 15 DEC 00

Reported: 29 DEC 00

Mr. Steve McFadden  
HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: BROWN-BRIDGE/SPINNAKER COATINGS

Sampled By: Client

Code: 133101229

Page 6

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED			
12369-6	PW-4	12-13-00/14:30			
12369-7	GZA-1	12-13-00/12:50			
12369-8	PW-1	12-13-00/09:40			
12369-9	KMW-7	12-13-00/13:35			
12369-10	KMW-8	12-13-00/11:00			
PARAMETER	12369-6	12369-7	12369-8	12369-9	12369-10
Xylenes, Total, ug/l	<2.0	<2.0	<2.0	<2.0	<2.0
Surrogate - 4-Bromofluorobenzene (PID), ug/l	106 %	106 %	106 %	106 %	107 %
Surrogate - 4-Bromofluorobenzene (ELCD), ug/l	119 %	119 %	118 %	117 %	119 %
Dilution Factor	1	1	1	1	1
Analysis Date	12.26.00	12.26.00	12.26.00	12.27.00	12.27.00
Batch ID	PHW164	PHW163	PHW163	PHW163	PHW164
Prep Method	5030	5030	5030	5030	5030
Analyst	CP	CP	CP	CP	CP

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: C0-12369

Received: 15 DEC 00

Reported: 29 DEC 00

Mr. Steve McFadden  
HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: BROWN-BRIDGE/SPINNAKER COATINGS

Sampled By: Client

Code: 133101229

Page 7

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED	
12369-11	KMW-9	12-13-00/11:30	
12369-12	EEIB-12	12-13-00/10:15	
PARAMETER		12369-11	12369-12
Aromatic and Halogenated Volatiles (8021)			
Benzene, ug/l		<1.0	<1.0
Bromobenzene, ug/l		<3.0	<3.0
Bromodichloromethane, ug/l		<1.0	<1.0
Bromoform, ug/l		<2.0	<2.0
Bromomethane (Methyl bromide), ug/l		<2.0	<2.0
Carbon tetrachloride, ug/l		<1.0	<1.0
Chlorobenzene, ug/l		<1.0	<1.0
Chloroethane, ug/l		<5.0	<5.0
2-Chloroethylvinyl ether, ug/l		<5.0	<5.0
Chloroform, ug/l		<2.0	<2.0
Chloromethane, ug/l		<5.0	<5.0
Dibromochloromethane, ug/l		<5.0	<5.0
Dibromomethane (Methylene bromide), ug/l		<5.0	<5.0
1,2-Dichlorobenzene, ug/l		<2.0	<2.0
1,3-Dichlorobenzene, ug/l		<2.0	<2.0
1,4-Dichlorobenzene, ug/l		<2.0	<2.0
Dichlorodifluoromethane, ug/l		<5.0	<5.0
1,1-Dichloroethane, ug/l		<1.0	1.1
1,2-Dichloroethane, ug/l		<1.0	<1.0
1,1-Dichloroethene, ug/l		<1.0	<1.0
cis-1,2-Dichloroethene, ug/l		4.1	5.3
trans-1,2-Dichloroethene, ug/l		<1.0	<1.0
1,2-Dichloroethene (total), ug/l		4.1	5.3
1,2-Dichloropropane, ug/l		<1.0	<1.0

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: C0-12369

Received: 15 DEC 00

Reported: 29 DEC 00

Mr. Steve McFadden  
HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: BROWN-BRIDGE/SPINNAKER COATINGS

Sampled By: Client

Code: 133101229

Page 8

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED	
12369-11	KMW-9	12-13-00/11:30	
12369-12	EEIB-12	12-13-00/10:15	
PARAMETER		12369-11	12369-12
cis-1,3-Dichloropropene, ug/l		<1.0	<1.0
trans-1,3-Dichloropropene, ug/l		<1.0	<1.0
Ethylbenzene, ug/l		<1.0	<1.0
Methylene chloride (Dichloromethane), ug/l		<5.0	<5.0
Methyl t-butyl ether (MTBE), ug/l		<5.0	<5.0
1,1,1,2-Tetrachloroethane, ug/l		<1.0	<1.0
1,1,2,2-Tetrachloroethane, ug/l		<1.0	<1.0
Tetrachloroethene, ug/l		<3.0	<3.0
Toluene, ug/l		<5.0	<5.0
1,1,1-Trichloroethane, ug/l		1.4	<1.0
1,1,2-Trichloroethane, ug/l		<2.0	<2.0
Trichloroethene, ug/l		7.4	2.6
Trichlorofluoromethane, ug/l		<2.0	<2.0
1,2,3-Trichloropropane, ug/l		<5.0	<5.0
Vinyl chloride, ug/l		1.1R8	<1.0
Xylenes, Total, ug/l		<2.0	<2.0
Surrogate - 4-Bromofluorobenzene (PID), ug/l		106 %	107 %
Surrogate - 4-Bromofluorobenzene (ELCD), ug/l		120 %	114 %
Dilution Factor		1	1
Analysis Date		12.27.00	12.27.00
Batch ID		PHW164	PHW164
Prep Method		5030	5030
Analyst		CP	CP

Mr. Steve McFadden  
 HydroVision, Inc.  
 7094 Peachtree Executive Park Suite 300  
 Norcross, GA 30071

Project: BROWN-BRIDGE/SPINNAKER COATINGS

Sampled By: Client

Code: 133101229

Page 9

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
12369-13	Trip Blank	12-13-00
PARAMETER	12369-13	
Aromatic and Halogenated Volatiles (8021)		
Benzene, ug/l		<1.0
Bromobenzene, ug/l		<3.0
Bromodichloromethane, ug/l		<1.0
Bromoform, ug/l		<2.0
Bromomethane (Methyl bromide), ug/l		<2.0
Carbon tetrachloride, ug/l		<1.0
Chlorobenzene, ug/l		<1.0
Chloroethane, ug/l		<5.0
2-Chloroethylvinyl ether, ug/l		<5.0
Chloroform, ug/l		<2.0
Chloromethane, ug/l		<5.0
Dibromochloromethane, ug/l		<5.0
Dibromomethane (Methylene bromide), ug/l		<5.0
1,2-Dichlorobenzene, ug/l		<2.0
1,3-Dichlorobenzene, ug/l		<2.0
1,4-Dichlorobenzene, ug/l		<2.0
Dichlorodifluoromethane, ug/l		<5.0
1,1-Dichloroethane, ug/l		<1.0
1,2-Dichloroethane, ug/l		<1.0
1,1-Dichloroethene, ug/l		<1.0
cis-1,2-Dichloroethene, ug/l		<1.0
trans-1,2-Dichloroethene, ug/l		<1.0
1,2-Dichloroethene (total), ug/l		<1.0
1,2-Dichloropropane, ug/l		<1.0
cis-1,3-Dichloropropene, ug/l		<1.0



STL Pensacola

LOG NO: C0-12369

Received: 15 DEC 00

Reported: 29 DEC 00

Mr. Steve McFadden  
 HydroVision, Inc.  
 7094 Peachtree Executive Park Suite 300  
 Norcross, GA 30071

Project: BROWN-BRIDGE/SPINNAKER COATINGS

Sampled By: Client

Code: 133101229

Page 10

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
12369-13	Trip Blank	12-13-00
PARAMETER	12369-13	
trans-1,3-Dichloropropene, ug/l	<1.0	
Ethylbenzene, ug/l	<1.0	
Methylene chloride (Dichloromethane), ug/l	<5.0	
Methyl t-butyl ether (MTBE), ug/l	<5.0	
1,1,1,2-Tetrachloroethane, ug/l	<1.0	
1,1,2,2-Tetrachloroethane, ug/l	<1.0	
Tetrachloroethene, ug/l	<3.0	
Toluene, ug/l	<5.0	
1,1,1-Trichloroethane, ug/l	<1.0	
1,1,2-Trichloroethane, ug/l	<2.0	
Trichloroethene, ug/l	<1.0	
Trichlorofluoromethane, ug/l	<2.0	
1,2,3-Trichloropropane, ug/l	<5.0	
Vinyl chloride, ug/l	<1.0	
Xylenes, Total, ug/l	<2.0	
Surrogate - 4-Bromofluorobenzene (PID), ug/l	108 %	
Surrogate - 4-Bromofluorobenzene (ELCD), ug/l	120 %	
Dilution Factor	1	
Analysis Date	12.27.00	
Batch ID	PHW163	
Prep Method	5030	
Analyst	CP	

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: C0-12369

Received: 15 DEC 00

Reported: 29 DEC 00

Mr. Steve McFadden  
HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: BROWN-BRIDGE/SPINNAKER COATINGS

Sampled By: Client

Code: 133101229

Page 11

## REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
12369-14	Method Blank	
12369-15	Lab Control Standard & Recovery	
PARAMETER	12369-14	12369-15
Aromatic and Halogenated Volatiles (8021)		
Benzene, ug/l	<1.0	98 %
Bromobenzene, ug/l	<3.0	---
Bromodichloromethane, ug/l	<1.0	---
Bromoform, ug/l	<2.0	---
Bromomethane (Methyl bromide), ug/l	<2.0	---
Carbon tetrachloride, ug/l	<1.0	---
Chlorobenzene, ug/l	<1.0	96 %
Chloroethane, ug/l	<5.0	---
2-Chloroethylvinyl ether, ug/l	<5.0	---
Chloroform, ug/l	<2.0	---
Chloromethane, ug/l	<5.0	---
Dibromochloromethane, ug/l	<5.0	---
Dibromomethane (Methylene bromide), ug/l	<5.0	---
1,2-Dichlorobenzene, ug/l	<2.0	---
1,3-Dichlorobenzene, ug/l	<2.0	---
1,4-Dichlorobenzene, ug/l	<2.0	---
Dichlorodifluoromethane, ug/l	<5.0	---
1,1-Dichloroethane, ug/l	<1.0	---
1,2-Dichloroethane, ug/l	<1.0	---
1,1-Dichloroethene, ug/l	<1.0	124 %
cis-1,2-Dichloroethene, ug/l	<1.0	---
trans-1,2-Dichloroethene, ug/l	<1.0	---
1,2-Dichloroethene (total), ug/l	<1.0	---
1,2-Dichloropropane, ug/l	<1.0	---

SEVERN

TRENT

SERVICES

STL Pensacola

LOG NO: C0-12369

Received: 15 DEC 00

Reported: 29 DEC 00

Mr. Steve McFadden  
HydroVision, Inc.  
7094 Peachtree Executive Park Suite 300  
Norcross, GA 30071

Project: BROWN-BRIDGE/SPINNAKER COATINGS

Sampled By: Client

Code: 133101229

Page 12

## REPORT OF RESULTS

DATE/


LOG NO SAMPLE DESCRIPTION, QC REPORT FOR LIQUID SAMPLES TIME SAMPLED

12369-14 Method Blank

12369-15 Lab Control Standard % Recovery

PARAMETER	12369-14	12369-15
cis-1,3-Dichloropropene, ug/l	<1.0	---
trans-1,3-Dichloropropene, ug/l	<1.0	---
Ethylbenzene, ug/l	<1.0	---
Methylene chloride (Dichloromethane), ug/l	<5.0	---
Methyl t-butyl ether (MTBE), ug/l	<5.0	---
1,1,1,2-Tetrachloroethane, ug/l	<1.0	---
1,1,2,2-Tetrachloroethane, ug/l	<1.0	---
Tetrachloroethene, ug/l	<3.0	---
Toluene, ug/l	<5.0	98 %
1,1,1-Trichloroethane, ug/l	<1.0	---
1,1,2-Trichloroethane, ug/l	<2.0	---
Trichloroethene, ug/l	<1.0	110 %
Trichlorofluoromethane, ug/l	<2.0	---
1,2,3-Trichloropropane, ug/l	<5.0	---
Vinyl chloride, ug/l	<1.0	---
Xylenes, Total, ug/l	<2.0	---
Surrogate - 4-Bromofluorobenzene (PID), ug/l	104 %	108 %
Surrogate - 4-Bromofluorobenzene (ELCD), ug/l	114 %	92 %
Dilution Factor	1	1
Analysis Date	12.22.00	12.22.00
Batch ID	PHW162	PHW162
Prep Method	5030	5030
Analyst	CP	CP

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

  
Rick Hayes, Project Manager

## Data Qualifiers for Final Report

## STL-Pensacola Inorganic/Organic

## STL Pensacola

B1	The analyte was detected in the associated method blank (sample itself is flagged even though sample is ND).
B2	The analyte was detected in the sample(s) and in the associated method blank analyzed on the day samples were extruded; however, this analyte was not detected in the blank analyzed with the samples.
B3	The analyte was found in the associated blank as well as in the associated sample(s) (qualifier is applied to the sample, not to the blank).
B4	Sample results were corrected due to contaminants in Fractionation Blank
D	Diluted out (surrogate or spike due to sample dilution)
E	Compound concentration exceeds the upper calibration range of the instrument.
F	The reported value is < STL-Pensacola RL and > the STL-Pensacola MDL; therefore, the quantitation is estimation (The STL-PN RL is at or above lowest calibration standard in the initial calibration curve).
G	Sample and/or duplicate result is at or below 5 X (times) the STL Reporting Limit and the absolute difference between the sample and duplicate result is at or below the STL reporting limit; therefore, the results are "in control".
H1	Sample and/or duplicate is below 5 X (times) the STL Reporting Limit and the absolute difference between the results exceeds the STL Reporting Limit; therefore, the results are "out of control"
H2	Sample and duplicate (or MS and MSD) RPD is above control limit.
J (description)	The analyte was positively identified, the quantitation may be an estimation
J4	(For positive results) Temperature limits exceeded ( $\leq 2^{\circ}\text{C}$ or $\geq 6^{\circ}\text{C}$ ); non-reportable for NPDES compliance monitoring.
J6	(For positive results) LCS or Surrogate %R is > upper control limit (UCL), results may be biased high
J7	The reported value is > the laboratory MDL and < lowest calibration standard; therefore, the quantitation is an estimation (this qualifier should only be used when the STL-PN RL is below the lowest calibration standard in the initial calibration).
J8	Matrix spike and post spike recoveries are outside control limits. See out of Control Events/Corrective Action Form.
J9	(For positive results) LCS or Surrogate %R is < lower control limit (LCL), results may be biased low
M1	A matrix effect was present (1 sample, MS or MSD was analyzed twice to confirm surrogate/spike failure, 2 sample and/or MS/MSD chromatogram(s) had interfering peaks, 3 sample result was > 4 X spike added, 4 metals serial dilution was performed, or 5 metals post spike is < 40% R)
M2	The MS and/or MSD %R or RPD was outside upper or lower control limits; not necessarily due to matrix effect.
N/C	Not Calculable; Sample spiked is > 4X spike concentration (may also use this flag in place of negative numbers)
NH	Sample and duplicate results are "out of control". The sample is nonhomogeneous.
NOMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)
Q	The analytical (post digestion) spike is reported due to the percent recovery being outside limits on the matrix (pre-digestion) spike.
R (description)	The data may be unusable due to deficiencies in the ability to analyze the sample and meet QC criteria
R1	(For nondetects) Temperature limits exceeded ( $\leq 2^{\circ}\text{C}$ or $\geq 6^{\circ}\text{C}$ ); non-reportable for NPDES compliance monitoring
R2	Improper preservation, no preservative present or insufficient amounts of preservative in sample upon receipt, non-reportable for NPDES compliance monitoring
R3	Improper preservation, incorrect preservative present in sample upon receipt, non-reportable for NPDES compliance
R4	Holding time exceeded, non-reportable for NPDES compliance monitoring.
R5	Collection requirements not met, improper container used for sample
R6	LCS or surrogate %R is < LCL and analyte is not detected or surrogate %R is < 10% for detects/nondetects.
R7	Internal standard area outside -50% to +100% of calibration verification standard.
R8	Initial calibration or any calibration verification exceeds acceptance criteria.
R9	Not filtered and preserved at time of collection.
R10	Headspace > 1/4" in diameter in volatile vials, non-reportable for NPDES compliance monitoring
R11	Samples were filtered and preserved within 4 hours of collection.
R12	Analysis performed outside the 12-hour tune or not within tune criteria.
S1	The Method of Standard Additions (MSA) has been performed on this sample.
S2	Incorrect sample amount was submitted to the laboratory for analysis
S3 (Flashpoint)	This method is not designed for solids and the results may not be accepted by any regulator for such purposes.
T	Second-column or detector confirmation exceeded the SW-846 criteria of 40% RRD for this compound.
TIC	The compound is not within the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound.
U	The reported value is < Laboratory MDL (value for result will be the MDL, never below the MDL)
W	Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance.
@	Adjusted reporting limit due to sample composition, not due to overcal (dilution prior to digestion and/or analysis).
#	Elevated reporting limit due to insufficient sample size
1 pt	The compound has been quantitated against a one point calibration.
* (Metals & Wet Chem)	Elevated reporting limit due to matrix interference (dilution prior to digestion and/or analysis)

**SEVERN TRENT LABORATORIES, INC. - PENSACOLA, FLORIDA**  
**STATE CERTIFICATIONS**

*Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)*

*Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)*

*Arkansas Department of Pollution Control and Ecology, (No Laboratory ID No. assigned by state) (Environmental)*

*State of California, Department of Health Services, Laboratory ID No. 2338 (Hazardous Waste and Wastewater)*

*State of Connecticut, Department of Health Services, Connecticut Lab Approval No. PH-0697 (Drinking Water, Hazardous Waste and Wastewater)*

*Delaware Health & Social Services, Division of Public Health, Laboratory ID No. FL094 (Drinking Water by Reciprocity with FL)*

*Florida DOH Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater)*

*Florida, Radioactive Materials License No. G0733-I*

*Foreign Soil Permit, Permit No. S-37599*

*Kansas Department of Health & Environment, Laboratory ID No. E10253 (Wastewater and Hazardous Waste)*

*Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Laboratory ID No. 90043 (Drinking Water)*

*State of Louisiana, DHH, Office of Public Health Division of Laboratories, Laboratory ID No. LA000017 (Drinking Water)*

*Louisiana Department of Environmental Quality, Environmental Laboratory Accreditation Program, Agency Interest ID 30748 (Environmental - Accreditation Pending)*

*State of Maryland, DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)*

*Commonwealth of Massachusetts, DEP, Laboratory ID No. M-FL094 (Hazardous Waste and Wastewater)*

*State of Michigan, Bureau of E&OcCH, Laboratory ID No. 9912 (Drinking Water by Reciprocity with Florida)*

*New Hampshire DES ELAP, Laboratory ID No. 250599A (Wastewater)*

*State of New Jersey, Department of Environmental Protection & Energy, Laboratory ID No. 49006 (Wastewater and Hazardous Waste)*

*New York State, Department of Health, Laboratory ID No. 11503 (Wastewater and Solids/Hazardous Waste)*

*North Carolina Department of Environment & Natural Resources, Laboratory ID No. 314 (Hazardous Waste and Wastewater)*

*North Dakota DH&Consol Labs, Laboratory ID No. R-108 (Drinking Water, Wastewater and Hazardous Waste by Reciprocity with Florida)*

*State of Oklahoma, Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)*

*Commonwealth of Pennsylvania, Department of Environmental Resources, Laboratory ID No. 68-467 (Drinking Water)*

*South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater by Reciprocity with FL and Solids/Hazardous Waste by Reciprocity with CA)*

*Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)*

*Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)*

*State of Washington, Department of Ecology, Laboratory ID No. C282 (Hazardous Waste and Wastewater)*

*West Virginia Division of Environmental Protection, Office of Water Resources, Laboratory ID No. 136 (Hazardous Waste and Wastewater by Reciprocity with FL)*

*American Industrial Hygiene Association (AIHA) Accredited Laboratory, Laboratory ID No. 100704*

## CHAIN OF CUSTODY

**LAB ACCESSION #**

**RT 1 - Bottle Shipment Information**

**CLIENT:**

**CLIENT PROJECT NUMBER:**[illegible]

Relinquished By

Time

Date \_\_\_\_\_

Received By:

Time

Date \_\_\_\_\_

**PART 2 - Sample Project Information**

### PARAMETERS AND PRESERVATIVES REQUESTED

DW DRINKING WATER  
WW WASTEWATER  
GW GROUNDWATER

### SAMPLE MATRIX CODES

AI	AIR
SO	SOIL
OI	OIL

SW SURFACE WATER  
SL SLUDGE  
ST STORMWATER

**TOTAL #  
OF  
BOTTLES:**

SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME	MATRIX
KMW-5	12/13/00	12:15	GLW
FEEB-4	12/13/00	2:45	
FEEB-2		1:45	
PW-2		2:00	
PW-3		2:15	
PW-4		2:30	
GZA-1		12:50	
PW-1		9:40	
KMW-7		1:35	
KMW-8		11:00	

Total Number of Bottles/Containers:

**Relinquished By**

Date \_\_\_\_\_

Time

Received By \_\_\_\_\_

Date \_\_\_\_\_

Time

NAME	DATE	TIME	RECEIVED BY	DATE	TIME
Joseph Chambers	12/13/00	4:00	Julie Johnson STL-PNS	12/13/00	0935
				12/14/00	gg

Client			Purchase Order Number
Address			Project Number
City	State	Zip	Project Name
Phone Number (     )	Fax Number (     )		Project Location
Project Manager			Sampled By

TURNAROUND TIMES	check below	SPECIAL INSTRUCTIONS
Standard - 14-21 days		
RUSH (must be approved in advance)		
48 hours - 2x standard price		
days - 1.5x standard price		
TCLP - 1 week rush 1.5x standard price		
QC Level   none   I   II   III   IV   (circle one)	Copies of report needed _____	

## CHAIN OF CUSTODY

**LAB ACCESSION #**

### RT 1 - Bottle Shipment Information

**CLIENT:**

**CLIENT PROJECT NUMBER:**[illegible]

Relinquished By:

Time

**Date**

Received By:

Type

	Time	Distance	Speed	Acceleration	Deceleration	Time	Distance	Speed	Acceleration	Deceleration
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.01	0.01	1.00	100.00	0.00	0.01	0.01	1.00	100.00	0.00
3	0.02	0.04	2.00	200.00	0.00	0.02	0.04	2.00	200.00	0.00
4	0.03	0.09	3.00	300.00	0.00	0.03	0.09	3.00	300.00	0.00
5	0.04	0.16	4.00	400.00	0.00	0.04	0.16	4.00	400.00	0.00
6	0.05	0.25	5.00	500.00	0.00	0.05	0.25	5.00	500.00	0.00
7	0.06	0.36	6.00	600.00	0.00	0.06	0.36	6.00	600.00	0.00
8	0.07	0.49	7.00	700.00	0.00	0.07	0.49	7.00	700.00	0.00
9	0.08	0.64	8.00	800.00	0.00	0.08	0.64	8.00	800.00	0.00
10	0.09	0.81	9.00	900.00	0.00	0.09	0.81	9.00	900.00	0.00
11	0.10	1.00	10.00	1000.00	0.00	0.10	1.00	10.00	1000.00	0.00
12	0.11	1.21	11.00	1100.00	0.00	0.11	1.21	11.00	1100.00	0.00
13	0.12	1.44	12.00	1200.00	0.00	0.12	1.44	12.00	1200.00	0.00
14	0.13	1.69	13.00	1300.00	0.00	0.13	1.69	13.00	1300.00	0.00
15	0.14	1.96	14.00	1400.00	0.00	0.14	1.96	14.00	1400.00	0.00
16	0.15	2.25	15.00	1500.00	0.00	0.15	2.25	15.00	1500.00	0.00
17	0.16	2.56	16.00	1600.00	0.00	0.16	2.56	16.00	1600.00	0.00
18	0.17	2.89	17.00	1700.00	0.00	0.17	2.89	17.00	1700.00	0.00
19	0.18	3.24	18.00	1800.00	0.00	0.18	3.24	18.00	1800.00	0.00
20	0.19	3.61	19.00	1900.00	0.00	0.19	3.61	19.00	1900.00	0.00
21	0.20	4.00	20.00	2000.00	0.00	0.20	4.00	20.00	2000.00	0.00
22	0.21	4.41	21.00	2100.00	0.00	0.21	4.41	21.00	2100.00	0.00
23	0.22	4.84	22.00	2200.00	0.00	0.22	4.84	22.00	2200.00	0.00
24	0.23	5.29	23.00	2300.00	0.00	0.23	5.29	23.00	2300.00	0.00
25	0.24	5.76	24.00	2400.00	0.00	0.24	5.76	24.00	2400.00	0.00
26	0.25	6.25	25.00	2500.00	0.00	0.25	6.25	25.00	2500.00	0.00
27	0.26	6.76	26.00	2600.00	0.00	0.26	6.76	26.00	2600.00	0.00
28	0.27	7.29	27.00	2700.00	0.00	0.27	7.29	27.00	2700.00	0.00
29	0.28	7.84	28.00	2800.00	0.00	0.28	7.84	28.00	2800.00	0.00
30	0.29	8.41	29.00	2900.00	0.00	0.29	8.41	29.00	2900.00	0.00
31	0.30	9.00	30.00	3000.00	0.00	0.30	9.00	30.00	3000.00	0.00
32	0.31	9.61	31.00	3100.00	0.00	0.31	9.61	31.00	3100.00	0.00
33	0.32	10.24	32.00	3200.00	0.00	0.32	10.24	32.00	3200.00	

## PART 2 - Sample/Project Information

### PARAMETERS AND PRESERVATIVES REQUESTED

SAMPLE MATRIX CODES		
DW DRINKING WATER	AI AIR	SW SURFACE WATER
WW WASTEWATER	SO SOIL	SL SLUDGE
GW GROUNDWATER	OI OIL	ST STORMWATER

TOTAL #  
OF  
BOTTLES[illegible]

**Total Number of Bottles/Containers:**

Relinquished By

Date \_\_\_\_\_

Time

Received By

Date \_\_\_\_\_

**THE**

Relinquished  
Joseph L. Bunker

12/13/02

4:50

Julie Johnson STL-PNS

12/13/14	12/14/15
----------	----------

0435

**Client**

Purchase Order Number

**Address**

Project Number

City

State

**Zip**

Project Name

Phone Number ( )

Fax Number ( )

### Project Location

## Project Manager

**Sampled By**

TURNAROUND TIMES		check below	SPECIAL INSTRUCTIONS
Standard - 14-21 days			
RUSH (must be approved in advance)			
48 hours - 2x standard price			
days - 1.5x standard price			
TCLP - 1 week rush 1.5x standard price			
QC Level   none   I   II   III   IV   (circle one)		Copies of report needed _____	

# STL Pensacola PROJECT SAMPLE INSPECTION FORM

SEVERN

TRENT

SERVICES

Lab Order #: C012369 Date Received: 12-14-00

- |  |                                      |                                      |                                      |
|--|--------------------------------------|--------------------------------------|--------------------------------------|
| 1. Was there a Chain of Custody?   | <input checked="" type="radio"/> Yes | <input type="radio"/> No*            |                                      |
| 2. Was Chain of Custody properly filled out and relinquished?  | Yes                                  | <input checked="" type="radio"/> No* |                                      |
| 3. Were samples received cold? (Criteria: 2° - 6°C: STL-SOP)   | <input checked="" type="radio"/> Yes | <input type="radio"/> No*            | N/A                                  |
| 4. Were all samples properly labeled and identified?   | <input checked="" type="radio"/> Yes | <input type="radio"/> No*            |                                      |
| 5. Did samples require splitting or compositing*?  | Yes*                                 | <input checked="" type="radio"/> No  |                                      |
| Req By: PM Client Other*   | <input checked="" type="radio"/> Yes | <input type="radio"/> No*            |                                      |
| 6. Were samples received in proper containers for analysis requested?  | <input checked="" type="radio"/> Yes | <input type="radio"/> No*            |                                      |
| 7. Were all sample containers received intact?   | <input checked="" type="radio"/> Yes | <input type="radio"/> No*            |                                      |
| 8. Were samples checked for preservative? (Check pH of all H <sub>2</sub> O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace!) | Yes                                  | <input type="radio"/> No*            | <input checked="" type="radio"/> N/A |
| 9. Is there sufficient volume for analysis requested?  | <input checked="" type="radio"/> Yes | <input type="radio"/> No*            | N/A (Can)                            |
| 10. Were samples received within Holding Time? (REFER TO STL-SOP 1040)   | <input checked="" type="radio"/> Yes | <input type="radio"/> No*            |                                      |
| 11. Is Headspace visible > 1/4" in diameter in VOA vials? If any headspace is evident, comment in out-of-control section.  | Yes*                                 | <input checked="" type="radio"/> No  | N/A                                  |
| 12. If sent, were matrix spike bottles returned?   | Yes                                  | <input type="radio"/> No*            | <input checked="" type="radio"/> N/A |
| 13. Was Project Manager notified of problems? (initials: _____)  | Yes                                  | <input type="radio"/> No*            | <input checked="" type="radio"/> N/A |

Airbill Number(s): 0376 7394839

Shipped By: UPS

Cooler Number(s): CLIENT

Shipping Charges: N/A

Cooler Weight(s): 16 lbs

Cooler Temp(s) (°C): 3°

CEK4

(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

## Out of Control Events and Inspection Comments:

#2) ALL INFORMATION ON BOTTOM HALF OF COC WAS NOT FILLED IN.  
JF 12-14-00

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: JF Date: 12-14-00 Logged By: LLK Date: 15-Dec-00

- \* Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples (pH, Dissolved O<sub>2</sub>, Residual Cl) as out of hold time, therefore, these samples will not be documented on this PSIF.
- \* If Other, note who requested the splitting or compositing of samples on the Comment Section of this form. All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)".
- \* All preservatives for the State of North Carolina, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (STL-SOP 938, section 2.2.9).
- \* According to EPA, 1/4" of headspace is allowed in 40 ml vials requiring volatile analysis, however, STL makes it policy to record any headspace as out-of-control (STL-SOP 938, section 2.2.12).





ENVIRONMENTAL SERVICES

RECEIVED  
OHIO EPA

APR 22 2002

SOUTHWEST DISTRICT

## CLOSURE REPORT

SPINNAKER FACILITY – WEST END  
TROY, OHIO

April 2002

### PREPARED FOR:

KIMBERLY-CLARK CORPORATION  
ROSWELL, GEORGIA

### PREPARED BY:

Bruce C. Alleman, Battelle Memorial Institute  
Steve McFadden, Mill Creek Environmental Services  
Pam Rodgers, Battelle Memorial Institute

## EXECUTIVE SUMMARY

Spinnaker Coating, Inc. manufactures pressure-, moisture- and heat-sensitive adhesive stock for labels, stamps and related items at two plants at separate sites in Troy, Ohio. Plant 1 is located at 518 East Water Street and is the subject of this report. The facility started operations in 1928 when Brown-Bridge Industries, Inc. began manufacturing adhesive products. Kimberly-Clark Corporation acquired Brown-Bridge Industries in 1971 and continued operation of the facility until 1994 when the property was sold to Spinnaker.

Environmental assessments were conducted as part of Kimberly-Clark's sale of the property to Spinnaker. Soil and groundwater impacted by fuel oil and volatile organic compound (VOC) (primarily toluene) releases were discovered in two small areas on the west side of the facility. Groundwater impacted by toluene releases was discovered in two small areas on the east side of the facility. In addition, VOCs were found to be migrating onto the Spinnaker property in shallow groundwater flow from an upgradient, off-site source or sources.

Remediation of the four impacted areas on the Spinnaker property began in April 1995 with the removal of impacted soil from the two areas on the west end of the facility and installation of groundwater remediation systems in all four areas. The Ohio Environmental Protection Agency (OEPA) was involved in the development of the clean-up plan, reviewed Kimberly-Clark's clean-up goals, and encouraged Kimberly-Clark to begin voluntary remediation in accordance with the plan. Groundwater clean-up goals were achieved on the east end of the facility by January 1998 and the remediation system was shut down with no further action required. Clean-up goals or background concentrations were achieved on the west end of the facility by December 2000. Concentrations of VOCs, primarily tetrachloroethene (PCE) but also lower concentrations of trichloroethene (TCE), *cis*-1,2-dichloroethene (cDCE), and 1,1,1-trichloroethane (1,1,1-TCA), continue to migrate onto the Spinnaker property from off site. TCE and vinyl chloride, both breakdown products of PCE, continue to be present in groundwater on the down-gradient boundary of the Spinnaker property in concentrations exceeding MCLs but consistent with levels caused by the off-site source(s) of contamination.

OEPA expressed concerns about the source of remaining concentrations of VOCs on the Spinnaker property, the migration and breakdown mechanisms of VOCs coming onto the Spinnaker property, and the risks that remaining groundwater VOC concentrations pose to human health and the environment, including the City of Troy east well field located across the Great Miami River from the Spinnaker property. Consequently, Kimberly-Clark continued to operate the groundwater remediation system throughout 2001 to the present while conducting additional assessment to address OEPA's concerns.

The results and conclusions of this supplemental assessment, combined with over eight years of site investigation, remediation and analytical history, are presented in this report. The conclusions are:

1. PCE continues to migrate onto the property from an off-site source or sources. The PCE is reductively dechlorinated to produce the daughter products TCE, cDCE, and vinyl chloride and is the source of remaining concentrations of these compounds in groundwater on the Spinnaker property.
2. Regardless of the source, remaining groundwater VOC concentrations beneath the Spinnaker property do not pose any threat to public health or the environment either on or down gradient of the facility, including the City of Troy east well field. (Note that sources upgradient of the Spinnaker property and sources across the Great Miami River have not been evaluated and may pose a significant risk).
3. Remaining VOC concentrations in shallow groundwater beneath the Spinnaker property are not the responsibility of the present or any past property owner.
4. Multiple potential off-site sources of groundwater contamination exist upgradient of the Spinnaker property.
5. Multiple potential sources of groundwater contamination exist upgradient of the City of Troy east well field, located on the opposite side of the Great Miami River from the Spinnaker property.
6. The groundwater remediation system on the Spinnaker property has served its purpose as designed to remediate source areas on the Spinnaker property, but is completely ineffective for containment or remediation of groundwater contamination originating from off-site sources.

On the basis of this information and these conclusions, Kimberly-Clark has the following recommendations:

1. Discontinue operation of the groundwater extraction and treatment system. Continued operation of this system serves no environmental purpose.
2. Abandon all site pumping and monitoring wells in accordance with applicable standards, or transfer ownership of the wells to the State for use in their continuing efforts in this area of Troy.
3. Public regulatory agencies should investigate off-site sources of VOCs in groundwater and their potential risk to the public and environment.

## TABLE OF CONTENTS

### **EXECUTIVE SUMMARY**

	<u>Page</u>
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
<b>2.0 SITE BACKGROUND.....</b>	<b>6</b>
<b>2.1 Facility Description and Operational History .....</b>	<b>6</b>
2.1.1 Past Practices .....	6
2.1.2 Current Practices .....	7
<b>2.2 Site Hydrogeology .....</b>	<b>9</b>
2.2.1 Geologic Setting .....	10
2.2.2 Aquifer Testing.....	12
2.2.2.1 City of Troy Aquifer Test Results.....	12
2.2.2.2 AES Aquifer Test Results .....	12
2.2.2.3 OEPA Aquifer Test Results.....	14
<b>2.3 Baseline Contamination.....</b>	<b>14</b>
<b>2.4 History of Site Remediation Activities .....</b>	<b>16</b>
2.4.1 Source Area Excavations.....	16
2.4.2 Groundwater Treatment .....	19
2.4.2.1 Remedial System Design.....	19
2.4.2.2 System Operation .....	21
2.4.2.3 System Performance .....	22
<b>3.0 CURRENT STATUS.....</b>	<b>30</b>
<b>3.1 On-Going Remedial System Operation.....</b>	<b>30</b>
<b>3.2 Contaminant Flux and Distribution .....</b>	<b>32</b>

3.2.1 On-site Contamination.....	33
3.2.2 Contaminant Migration from Off-Site Sources .....	34
3.2.3 Fate and Transport of Contaminants Migrating Onto and Across the Spinnaker Property.....	36
4.0 PRELIMINARY RISK ASSESSMENT.....	43
4.1 Exposure Assessment.....	43
4.1.1 Potential Release Mechanisms and Exposure Points.....	44
4.1.2 Potential Receptors .....	46
4.1.3 Identification of Potentially Complete Exposure Pathways.....	47
4.2 Risk Characterization.....	47
4.2.1 Direct Contact with Chemicals in Soil .....	47
4.2.2 Inhalation of Vapors .....	48
4.2.3 Exposure to Ecological Receptors.....	49
4.2.4 Ingestion of Groundwater for Off-site Receptors .....	50
4.2.4.1 Conceptual Hydrogeological Model .....	50
5.0 CONCLUSIONS.....	56
6.0 RECOMMENDATIONS FOR FUTURE ACTION.....	58
7.0 REFERENCES .....	59

#### **APPENDIX A – DATA TABLES**

Table 1. Groundwater VOC Analytical Summary

Table 2. Groundwater Field Measurements

Table 3. Groundwater Chemistry Sample Results

#### **APPENDIX B – POTENTIOMETRIC MAPS**

## LIST OF FIGURES

	<u>Page</u>
Figure 1. Site Location Map .....	2
Figure 2. Average Potentiometric Surface, West End, August 1995-February 2002 .....	13
Figure 3. Spinnaker West End - Prior to Remediation .....	17
Figure 4. Groundwater Contaminant Concentrations, 1993 - 2002 .....	24
Figure 5. Spinnaker Remediation System Capture Zone .....	28
Figure 6. Groundwater Contaminant Concentrations, 2001/2 .....	31
Figure 7. Averaged PCE and Water Table Elevations along the Up Gradient Side of the Spinnaker Property.....	35
Figure 8. Averaged Molar Concentrations of Chlorinated Ethenes at the Spinnaker Site .....	40
Figure 9. Conceptual Site Model.....	45

## LIST OF TABLES

	<u>Page</u>
Table 1. Summary Comparison to Clean-up Goals, West End Soil Remediation .....	19
Table 2. Summary Comparison to Clean-up Goals, Year 2001/2, West End Groundwater Remediation .....	32
Table 3. Groundwater Data from Samples Collected by Ohio EPA on October 31, 2001 .....	38
Table 4. Average Potential PCE and Daughter Product Concentrations at the Down Gradient Spinnaker Property Line Based on the Most Recent Contaminant Concentrations Migrating onto the Property .....	42
Table 5. Comparison of Maximum Concentrations in Soil.....	48
Table 6. Comparison of Maximum Concentrations in Groundwater to Water Quality Standards .....	49
Table 7. Groundwater Data Used to Calculate the Average cDCE Concentration .....	53

## LIST OF ACRONYMS

AES - Applied Engineering & Science, Inc.

bgs - below ground surface

BOD - biochemical oxygen demand

cDCE - *cis*-dichloroethene

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

cfm - cubic feet per minute

COC - compounds of concern

COD - chemical oxygen demand

CSM - conceptual site model

1,1-DCA - 1,1-dichloroethane

EEIB - Environmental Enterprises, Inc. boring

GZA - GZA Environmental, Inc.

in. w.c. - inches of water column

MCL - maximum contaminant level

NPDES - National Pollutant Discharge Elimination System

OEPA - Ohio Environmental Protection Agency

OEPA USTAL - OEPA Underground Storage Tank Action Level

ORP - oxidation-reduction potential

PAH - polycyclic aromatic hydrocarbon

PCE – tetrachloroethene (perchloroethene)

POTW - publicly owned treatment works

ppb - parts per billion

ppm - parts per million

PRP - potentially responsible party

PVP/VA – polyvinylpyrrolidone/vinyl acetate

PW - pumping well

RCRA - Resource Conservation and Recovery Act

RS - roto sonic

SPCC - Spill Prevention Control and Containment

---

**LIST OF ACRONYMS (continued)**

1,1,1-TCA - 1,1,1-trichloroethane

TCE - Trichloroethene

TDS - total dissolved solids

TSDF - Treatment Storage and Disposal Facility

TOC - total organic carbon

TSS - total suspended solids

USEPA - United States Environmental Protection Agency

USEPA CAL - USEPA Corrective Action Level

UST - underground storage tank

VOC - volatile organic compound



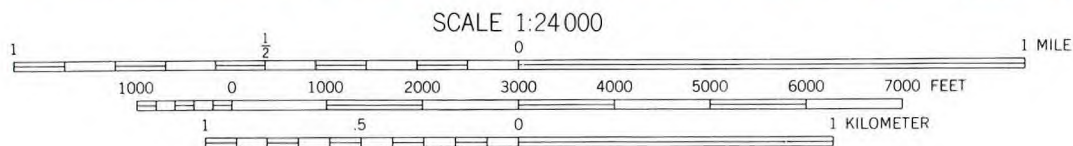
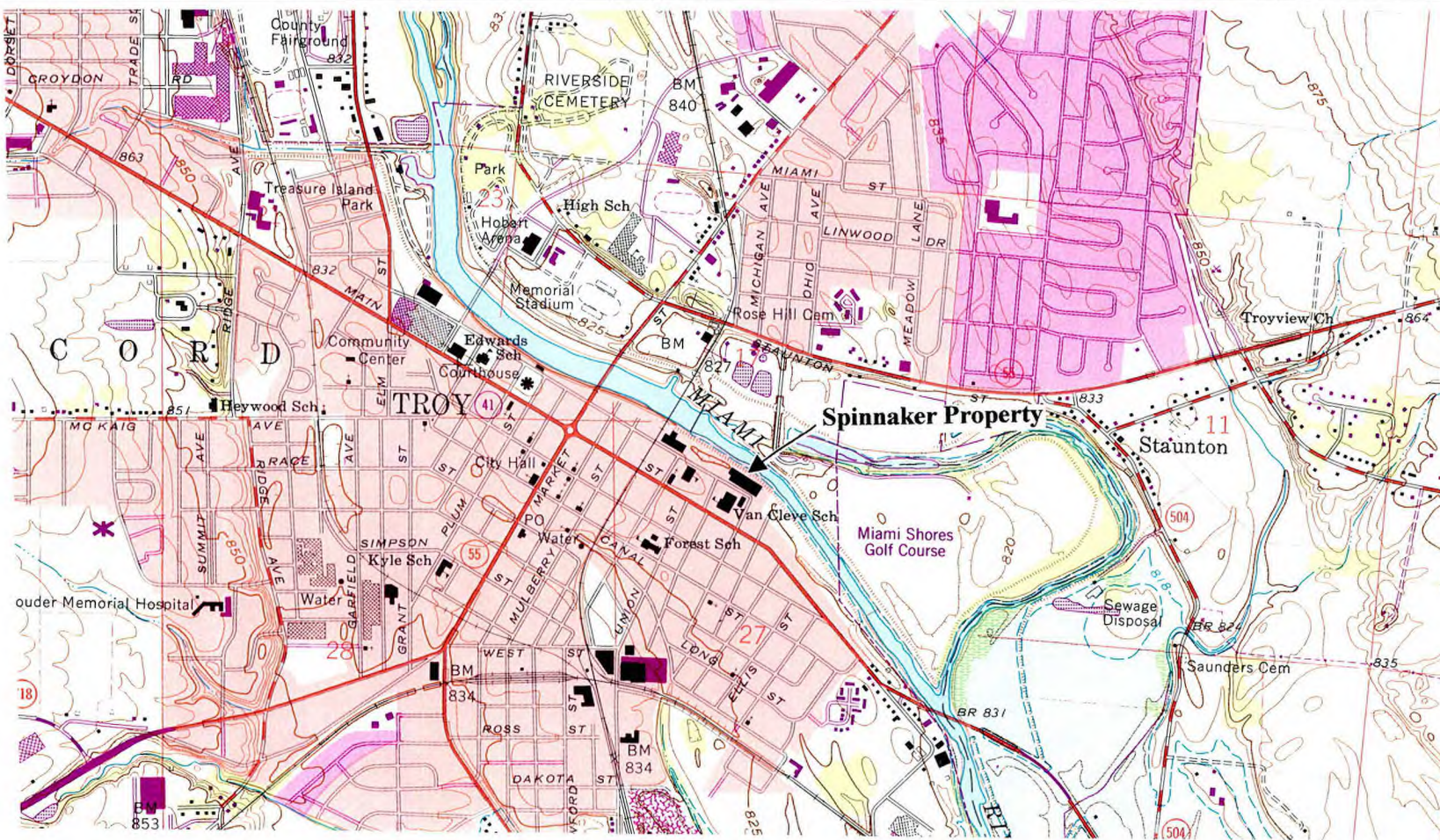
## 1.0 INTRODUCTION

Spinnaker Coating, Inc. manufactures pressure-, moisture- and heat-sensitive adhesive stock for labels, stamps and related items. The company operates two plants at separate sites in Troy, Ohio. Plant 1, henceforth referred to as the Spinnaker property, is located at 518 East Water Street and is the subject of this report.

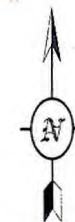
The facility on the Spinnaker property started operations in 1928 when Brown-Bridge Industries, Inc. began manufacturing adhesive products. Since then, the plant has expanded to include five connected buildings on approximately 5 acres adjacent to the Great Miami River (**Figure 1**). Kimberly-Clark Corporation acquired Brown-Bridge Industries, Inc. in 1971 and continued operation of the facility until 1994 when the property was sold to Spinnaker Coating, Inc. Spinnaker has continued operation of the facility.

Environmental assessments were conducted as part of Kimberly-Clark's sale of the property. Soil and groundwater impacted by fuel oil and volatile organic compound (VOC) (primarily toluene) releases were discovered in two small areas on the west side of the facility. In addition, groundwater impacted by toluene releases was discovered in two small areas on the east side of the facility. The environmental assessment and subsequent investigations also clearly identified VOCs (including tetrachloroethene and trichloroethene) migrating onto the Spinnaker property from an unidentified upgradient source or sources.

The releases were reported to the Ohio Environmental Protection Agency (OEPA). After discussions between OEPA and Kimberly-Clark that included submittal of site analytical data, the proposed remedial approach and proposed clean-up goals, OEPA concurred that Kimberly-Clark should proceed with a voluntary remediation of the site.



CONTOUR INTERVAL 5 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1929



**FIGURE 1**  
**SITE LOCATION MAP**  
**SPINNAKER COSTING, INC.**  
**TROY, OHIO**

Remediation of these areas began in April 1995 with the removal of impacted soil from the two areas on the west end of the facility and installation of groundwater remediation systems in all four areas (Applied Engineering & Science (AES), 1995). Groundwater clean-up goals were achieved on the east end of the facility by January 1998 and the remediation system was shut down with no further action required. As such, this report contains no further discussion of the east end of the property. Additional information regarding the remediation efforts conducted on the east end of the Spinnaker facility can be found in several reports (AES, 1993; AES, 1994; AES, 1995; AES 1998; McFadden, 2001).

Clean-up goals or background concentrations were achieved on the west end of the facility by December 2000. Although VOCs were still detected in the groundwater, the results of six years of sampling confirmed that the remaining levels were the result of migration of PCE onto the property and its subsequent breakdown through natural processes. These results were submitted to the OEPA in a closure report early in 2001 (McFadden, 2001) and the west end groundwater remediation system was turned off. OEPA objected to the termination of treatment citing a potential risk to one of the City of Troy's well fields.

The City of Troy obtains its drinking water from two well fields identified as the west well field and the east well field. The west well field is located approximately one mile northwest of the Spinnaker property on the opposite side of the Great Miami River. The east well field is located on the opposite site of the Great Miami River and approximately 1,200 feet downstream from the Spinnaker property. This well field includes five production wells installed parallel to the northeast side of the Great Miami River. Several other wells in this well field have been pumped in the past but are now abandoned or are not currently used.



Trichloroethene (TCE) has been detected in groundwater produced from the west well field at concentrations exceeding the Maximum Contaminant Level (MCL) of 5 µg/L established for drinking water by the United States Environmental Protection Agency (USEPA). *Cis*-1,2-dichloroethene (cDCE) has been sporadically detected at concentrations less than 1 µg/L in water samples collected from one of the wells in the east well field. Although the detected concentrations were well below the 70-µg/L MCL, OEPA has spent considerable resources evaluating whether the Spinnaker property could be a source of the cDCE; however, only a minimal effort has been made to investigate other potential and more likely sources on the other side of the river.

Data collected from groundwater samples collected on the west end of the main building on the Spinnaker property have shown low µg/L detections of chlorinated solvents including TCE, cDCE and vinyl chloride. Based on this data, OEPA raised questions about the impact that migration of these contaminants from the Spinnaker property might have on the City of Troy's east well field and other off site receptors. Pending an investigation to locate the source of the contamination and determine the potential impact of contamination leaving the property, OEPA ordered Kimberly-Clark to restart the west end groundwater remediation system (and that Order has been appealed). The system was restarted in April 2001 and operation continues to this date.

During the additional year that the groundwater remediation system has continued to operate, significant data have been collected which directly address OEPA's questions/concerns regarding contaminants detected at the Spinnaker property. The data clearly demonstrate that tetrachloroethene (PCE) continues to migrate onto the property at relatively high concentrations from an off-site source, and that the PCE is reductively dechlorinated to produce the daughter products TCE, cDCE, and vinyl chloride. This report provides an updated analysis of the west end of the Spinnaker site with respect to these issues and provides the basis for closure of this site.

The following sections of the report summarize the available data which confirm that:

- The VOC's detected at the west end of the Spinnaker property result from the migration of PCE onto the property from an unidentified upgradient source or sources and the subsequent breakdown of PCE through natural processes.
- Conditions at the Spinnaker site support the breakdown of PCE to TCE, cDCE and vinyl chloride.
- Using even the most conservative groundwater modeling assumptions, the concentrations of VOC's at the Spinnaker site do not present a risk to the Troy well field.
- Soil and groundwater conditions at and down gradient of the Spinnaker site do not present a risk to human health or the environment (note that sources and areas upgradient of, and across the river from, the Spinnaker property have not been evaluated and may pose such a risk).

Kimberly-Clark is not responsible for contamination migrating onto the Spinnaker property. Site conditions do not pose a risk to the well field or any other potential receptor. Moreover the existing groundwater treatment system cannot effectively treat the plume resulting from the migration of PCE onto the property. Accordingly, the operation of the groundwater system should be terminated and OEPA should recognize that Kimberly-Clark has completed the remediation of the Spinnaker facility.

## **2.0 SITE BACKGROUND**

### **2.1 Facility Description and Operational History**

The manufacturing facility on the Spinnaker property has been manufacturing pressure-, moisture- and heat-sensitive adhesive stock for labels, stamps and related items under several site owners since 1928. Solvents have been, and continue to be, used in the manufacturing process; however, the types of materials used and their storage, handling and disposal procedures have changed over the years. The following sections provide a summary of these changes.

#### **2.1.1 Past Practices**

Until 1995 when new storage facilities were built, Spinnaker had three 10,000-gallon, one 30,000-gallon, and one 300-gallon bulk aboveground storage tanks in use for hazardous and non-hazardous materials. The 10,000-gallon and 30,000-gallon tanks were used to store toluene, methanol and fuel oil. The 300-gallon tank was used to store gasoline. In addition, three underground tanks were used at the facility to store gasoline, fuel oil and toluene. Both the aboveground and underground tanks have been removed from service with proper closure. Except for the 300-gallon tank, the aboveground tanks were emptied and cleaned prior to disposal in 1995. The underground tanks were removed from service in 1988. Two of the tanks, the gasoline and toluene tank, were removed and disposed of properly. The fuel oil tank, which is located under the manufacturing building, was closed in place and filled with concrete slurry. All associated pipelines were cleaned, disassembled and disposed of properly.

Hazardous materials received in drums were stored on a concrete pad that was located west of the manufacturing building. The concrete pad had a sump at the entrance to capture spilled material.

The vast majority of the hazardous materials were used in the coating process. Toluene and methanol were stored in the three 10,000- gallon bulk tanks and used in the Dry Gum process on Coater #5. Isopropanol was received in drums and used on Coaters #5 and #2. Ammonia was received in the 5-gallon carboys and was mainly used on Coaters #1, #4, & #5. 1,1,1-Trichloroethane (TCA) was received in drums and was used to clean machinery and was used to test check the quality of product runs on the various coaters.

From 1981 to 1995 (approximate time frame), all hazardous materials were properly disposed of through a licensed hazardous waste disposal company. Materials were shipped to a treatment, storage, and disposal facility (TSDF) in 55-gallon drums and occasionally in bulk tankers. The drums were accumulated on a concrete pad that had secondary containment outside of the manufacturing building. The facility had a written Resource and Conservation Act (RCRA) Contingency/Spill Prevention Control and Containment (SPCC) plan. The plan addressed emergencies involving hazardous materials. Prior to 1981, materials were accumulated and disposed of in accordance with the regulations of the day.

### **2.1.2 Current Practices**

Spinnaker Coating, Inc. currently uses three 10,000-gallon and one 300-gallon bulk tanks for hazardous materials storage. These tanks are located on the east side of the facility. The 10,000-gallon tanks were installed in 1995 and the material in these tanks is contained within a tertiary containment system. The primary tank is contained inside a metal secondary containment box that is placed within a concrete tank farm dike. All the piping that serves this tank system is of double-wall construction. Both the tank system and the piping system employ a leak detection system to alert personnel of any problems. The 300-gallon tank was modified with secondary containment in 1995 and contains gasoline.

Hazardous materials received in drums are stored at two locations prior to use within the plant. The first location is a drum storage building specifically built to store hazardous materials. The building includes a secondary containment system to prevent any spillage from getting into the environment. The second location includes a series of secondary containment structures, which consist of metal containment boxes with a grate on top. The drums are placed on the grate and if a drum leaks, the hazardous material is contained within the metal box. The bulk of the hazardous materials are stored in these specialized facilities and only the amount of chemical required for a specific process is taken into the manufacturing building.

The Spinnaker facility receives small amounts of hazardous materials in containers that hold less than 55 gallons. Many of these are laboratory reagents in less than gallon size containers. The main raw material is an ammonia hydroxide solution that is received in 5-gallon carboy containers. These materials are stored inside the manufacturing building.

The vast majority of the chemicals received at the Spinnaker facility continue to be used in the coating process. Toluene and methanol are stored in the three 10,000-gallon bulk tanks and used in the Dry Gum process on Coater #5. Isopropanol is received in drums and used on Coaters #2 and #5. Polyvinylpyrrolidone/vinyl acetate (PVP/VA) is used on Coater #2. Ammonia is received in 5-gallon carboys and mainly used on Coaters #1, #2, & #5. Mineral spirits is received in drums and used for machine cleaning. 1,1,1-TCA received in drums is used to test check the quality of product runs on the various coaters.

All hazardous materials are properly disposed of through a licensed hazardous waste disposal company. Materials are shipped to the TSDF in 55-gallon drums. The drums are accumulated in the drum storage building outside of the manufacturing building. This building is covered and has its own secondary containment system. The facility has a written RCRA Contingency/SPCC plan. The plan addresses emergencies involving hazardous materials.



---

## 2.2 Site Hydrogeology

Numerous reports have been completed that provide information on the hydrogeology of the Spinnaker property and surrounding area of Troy. Schmidt (1984) and Spahr (1995) investigated the hydrogeology and groundwater pollution potential of Miami County, respectively. Panterra (1994) completed wellhead protection investigations for the City of Troy. Their work included evaluation of available hydrogeologic information, modeling of the aquifer, and an inventory of potential sources of contamination in the area of the two Troy well fields. EarthTech, under contract to OEPA, investigated several sites where known or suspected releases of contaminants to groundwater occurred in the area of the two Troy well fields (EarthTech, 1997).

Reports specific to the Spinnaker site include the initial site investigation reports, which first reported the impacted soil and groundwater and delineated the on-site contamination (AES, 1993; AES, 1994). As part of these site assessments, eleven monitoring wells were installed (three were later abandoned), 53 soil borings completed, 56 groundwater and 60 soil samples were collected and analyzed.

AES prepared a report in November 1995 that details the soil remediation on the property and the implementation of the groundwater remediation program to address the contaminant plumes discussed above. Soil sampling conducted for the soil remediation included 40 samples screened by field methods (head space and bioassay tests) and 168 samples submitted for laboratory analyses. These initial remediation activities also included the installation of nine additional site monitoring wells and four pumping wells. Site monitoring wells have been sampled on a quarterly basis since 1995 (background wells were sampled annually from 1997 through 2001). These sampling events have included the collection and analysis of approximately 470 groundwater samples. In addition, 158 water samples have been collected and analyzed from the groundwater treatment system.

OEPA and its contractors completed investigations on the Spinnaker property and east Troy well field (Earth Tech, 1997, OEPA, 2000; IT Corporation, 2001). The 1997 Earth Tech investigation included sampling in several areas of Troy. Eleven groundwater samples were collected from eight locations on properties adjacent to Spinnaker (PCE, TCE and cDCE were detected in groundwater samples collected on Hobart Cabinet property). The 2000 investigation (OEPA, 2000 and IT Corporation, 2001) included the installation of five borings and two additional monitoring wells (RS04 and RS06) on the Spinnaker property and the collection and analysis of 40 groundwater samples. An aquifer pump test was also conducted.

In total, from the initial site investigation in 1993 until the present, 22 monitoring wells (19 that still exist) and four pumping wells have been installed on the Spinnaker property along with 66 soil borings. Over 260 soil and 750 water samples have been collected and analyzed. The Spinnaker property is 4.4 acres in size, mostly under roof.

In November 1997, OEPA submitted a list of questions to Kimberly-Clark regarding the site and the remediation activities and results. Kimberly-Clark prepared and submitted a response to the questions in March 1998 (AES, 1998). A report describing the completion of the remedial activities was submitted to OEPA in February 2001 (McFadden, 2001).

### **2.2.1 Geologic Setting**

Unconsolidated glacial deposits overlying Paleozoic bedrock characterize the geology of the Troy area. The glacial deposits vary from clay- to gravel-sized material and typically range in thickness from 20 to 40 feet. In areas where erosional features (valleys) were developed on the older bedrock surface, the overlying glacial deposits are thicker. Most of the City of Troy, including the east well field, is underlain by these buried bedrock valleys where glacial deposits range up to 200 feet thick. Bedrock valleys acted as

drainage basins during glacial periods and subsequently filled with permeable sand and gravel deposits that formed productive aquifers.

The glacial deposits in the Troy area are divided into an upper and a lower aquifer, which are separated by a lower-permeability confining unit. The upper aquifer is typically 10 to 40 feet thick and was the unit impacted by releases at the Spinnaker facility. The lower aquifer is thicker than the upper aquifer and consists of buried bedrock valley sand and gravel deposits. The City of Troy's drinking water wells and Spinnaker's production wells are screened in this formation. The confining unit varies considerably in depth and thickness, but in the area of the east Troy well field is typically found at depths between 70 and 100 feet below ground surface (bgs) and ranges in thickness from 5 to 25 feet.

The Spinnaker property is underlain by generally clayey deposits and fill to depths of approximately 10 feet. The water table is encountered at depths between 10 and 12 feet in the upper aquifer, which consists of coarse sand with varying amounts of silt and fine sand. Clay was encountered in several test borings and monitoring wells at depths of approximately 28-30 feet (AES, 1993; AES 1994; AES, 1998). Two of OEPA's test borings did not encounter clay; however, these borings terminated at 50 feet (OEPA, 2000; IT Corporation, 2001).

Potentiometric maps of the upper aquifer underlying the Spinnaker property have been prepared for every complete water-level data set from August 1995 to the present and are included in Appendix B. The average groundwater gradient based on water table measurements in the upper aquifer has ranged from 0.0028 to 0.006, with the direction showing some variation from northeast to east. These results are consistent with other hydrogeological references for the Troy area (Panterra 1994 and Schmidt 1984). As would be expected, influences of the stage of the Great Miami River can be seen on some of these maps as localized reversals of gradient along the down gradient side of the Spinnaker Property. However, in all cases groundwater flow is from Water Street toward the Great Miami River across the Spinnaker property. There are no data refuting this

finding. An average potentiometric map, prepared using data from 1995 through 2002, illustrates the predominant flow direction across the Spinnaker Property (Figure 2).

### **2.2.2 Aquifer Testing**

Several aquifer tests have been conducted on the Spinnaker property and at the Troy well fields to evaluate the hydraulic properties of the upper and lower aquifers and the intervening confining unit. The more pertinent results are summarized below.

#### **2.2.2.1 City of Troy Aquifer Test Results**

Aquifer testing of the lower aquifer was conducted by contractors for the City of Troy as part of the City's water source development and wellhead protection program and a detailed report was published (Panterra, 1994). The hydraulic conductivity of the lower aquifer in the area of Troy's east well field ranged from 75.7 ft/d to 144 ft/d. This equates to transmissivity values ranging from approximately 9,800 ft<sup>2</sup>/d to 18,700 ft<sup>2</sup>/d. The storage coefficient was reported in the range of  $10^{-4}$  to  $10^{-5}$ , characteristic of confined conditions. The confining layer between the upper and lower aquifer was characterized with a hydraulic conductivity between 0.0003 ft/d and 0.22 ft/d.

#### **2.2.2.2 AES Aquifer Test Results**

AES conducted a pump test on the upper aquifer on the Spinnaker Property as part of the site remediation activities and published a detailed report describing the test and results in 1995 (AES, 1995). Data from this test were used to evaluate the hydraulic properties of the shallow aquifer and calculate the capture zone of the groundwater treatment system. The hydraulic conductivity ranged from 125 ft/d to 200 ft/d equating to transmissivity values ranging between 2,160 ft<sup>2</sup>/d and 4,100 ft<sup>2</sup>/d. The storage coefficient ranged from 0.013 to 0.033, characteristic of unconfined conditions.

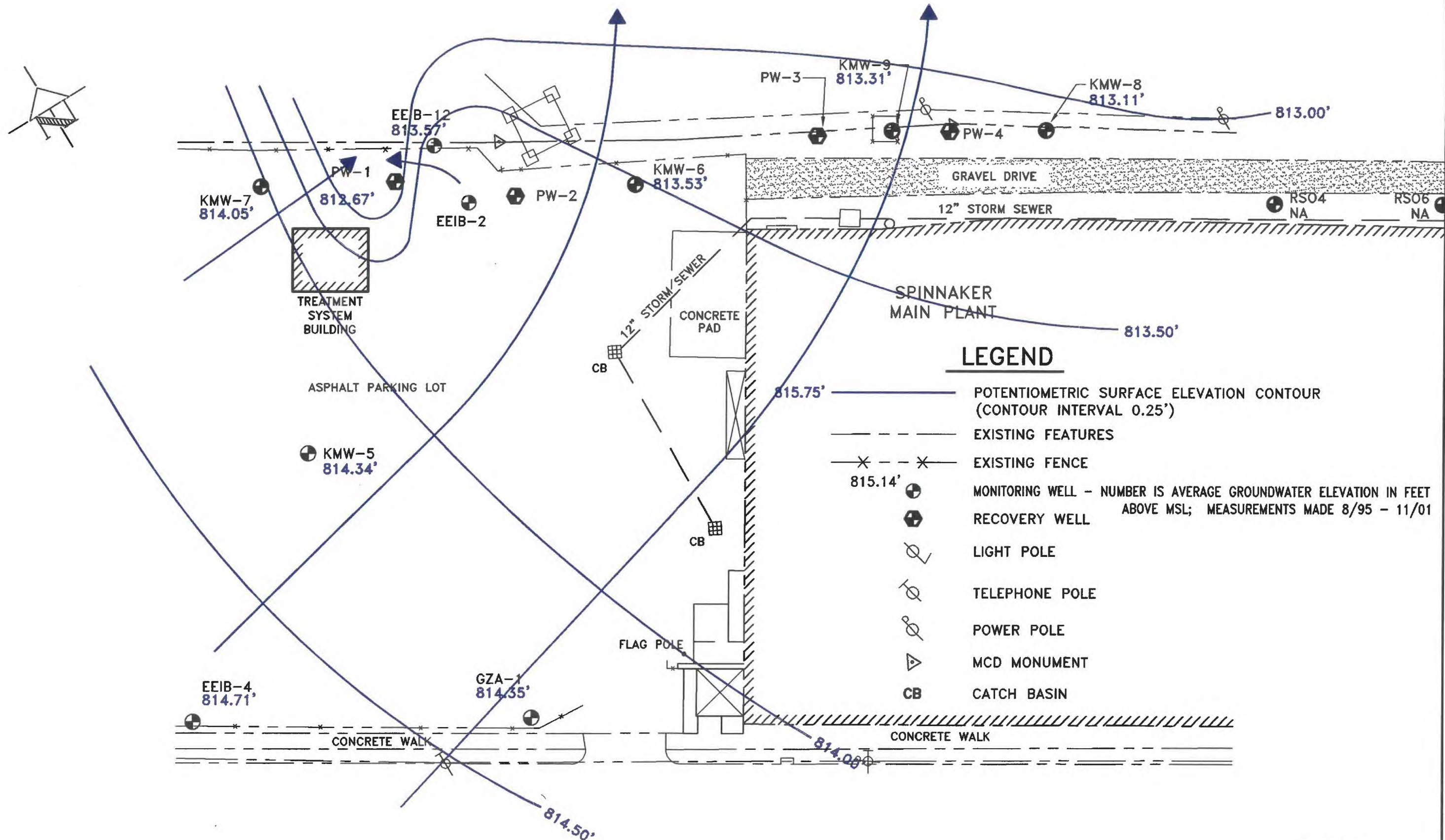


FIGURE 2

K:\DWG\0737A\0737AR38.DWG

SCALE	NO.	DATE	REVISION	DESCRIPTION
1" = 30'				
DWN. BY NJ				
CHK'D. BY NJ				
APPR. BY SSM				



Applied  
Engineering &  
Science

Atlanta  
Georgia

AVERAGE POTENTIOMETRIC SURFACE  
WEST END - AUGUST 1995-FEBRUARY 2002  
KIMBERLY-CLARK CORPORATION  
TROY, OHIO

DATE  
MARCH 2002  
DWG. NO.  
R38  
SHEET NO.  
3 OF 4

### **2.2.2.3 OEPA Aquifer Test Results**

OEPA conducted an aquifer test in the area of the Spinnaker facility in November-December 2000 (IT Corporation, 2001). Production wells in the City of Troy's east well field were utilized as pumping wells while water levels were monitored in observation wells on both the northeast (Troy's east well field) and southwest (Spinnaker property) sides of the Great Miami river. Water levels in three shallow piezometers in the bed of the river between the well field and the Spinnaker property were also monitored. During the test, Spinnaker Coating, Inc.'s two deep production wells and Kimberly-Clark's four shallow remediation wells continued normal operation. These wells are on the same side of the Spinnaker property and in close proximity to the observation wells used for the test. Operation of production and extraction wells on the Spinnaker property has been shown to impact the water levels in the observation wells (i.e. the monitoring wells) on the Spinnaker property. Therefore, it would prove very difficult to extrapolate out the contributions to water level changes caused by pumping the wells in the east well field and the wells operating on the property. Although performed over one year ago, no analysis of the data from the aquifer test has been provided by OEPA.

### **2.3 Baseline Contamination**

Site investigations completed in 1993 and 1994 as part of the sale of the property delineated the extent of impacted soil and groundwater at the site (AES, 1993; AES, 1994). Fuel oil constituents and volatile organic compounds (VOCs), including PCE, 1,1,1-TCA, and their respective daughter products TCE, cDCE, vinyl chloride, and 1,1-dichloroethane (1,1-DCA) and chloroethane, respectively, were detected in site soil and groundwater. PCE and 1,1,1-TCA were also detected in groundwater samples collected from monitoring wells located immediately adjacent to the property line on the upgradient side of the Spinnaker property, indicated that these compounds were migrating onto the property from an off-site source or sources.



The site investigations focused on known areas of environmental concern including hazardous and nonhazardous materials storage and handling locations. These areas included:

- The Bulk Storage Area – located in the west parking lot, this area contained aboveground tanks for the storage of fuel oil, virgin and reclaimed toluene and methanol.
- The Hazardous Waste Storage Area – located next to the Bulk Storage area, this area was used for temporary storage of drums of spent solvents and other hazardous materials until they were removed from the property.
- A 400-gallon Underground Storage Tank (UST) – Historically used to store gasoline and located on the east side of the Bulk Storage area. The tank was removed in 1988.
- The Nonhazardous Waste Storage Area – located adjacent to the west end of the Brown-Bridge Building in the west parking lot, used for storage of empty drums and drums of nonhazardous adhesive materials.

Results of these investigations indicated two areas on the west end of the Spinnaker property where releases had impacted soil and groundwater quality:

- In and down gradient of the Bulk Storage area, soil and groundwater were impacted by releases of fuel oil and toluene.
- In and down gradient of the Nonhazardous Waste Storage area, soil and groundwater were impacted by a release of VOCs.

Results of these investigations are summarized in **Figure 3**, which shows VOC concentrations in soil and groundwater prior to remediation on the west end of the Spinnaker facility. Toluene and polycyclic aromatic hydrocarbon (PAH) concentrations in and down gradient of Bulk storage area indicate that a release occurred from these tanks. Chlorinated VOCs were detected in soil and groundwater in and down gradient of the Nonhazardous Waste Storage. Detailed results of the investigations can be found in AES, 1993 and AES, 1994.

OEPA was notified of the findings from these investigations. After a series of correspondence and meetings, OEPA concurred that Kimberly-Clark should proceed with voluntary remediation of the site.

## **2.4 History of Site Remediation Activities**

Soil and groundwater remediation activities began in April 1995 (AES, 1995). Tanks in the Bulk Storage area were removed and a new bulk storage facility was designed and constructed on the east side of the Spinnaker Property. Impacted soil in the Bulk Storage and Nonhazardous Waste Storage areas was excavated and removed for off-site disposal and the excavation was filled with clean fill. A groundwater remediation system was installed to address two separate groundwater contaminant plumes on the west side of the facility. The system was installed in the summer of 1995 and began operation in August 1995.

### **2.4.1 Source Area Excavations**

Soil remediation activities in the source areas at both the Bulk Storage and Nonhazardous Waste Storage areas began on April 17, 1995. The goal of the excavation was to effectively remove the source of any contaminants and then to treat the remaining isolated areas of groundwater contamination. Prior to excavation of any impacted soil, the concrete pads and containment structures were removed. Approximately 130 cubic



K:\DWG\0737A\0737AK52.DWG

# CONSTITUENT LEGEND

A: toluene  
 B: benzene  
 C: ethylbenzene  
 D: total xylenes  
 E: trichloroethene  
 F: 1,1,1 trichloroethane  
 G: 1,1 dichloroethane  
 H: chloroethane  
 I: vinyl chloride  
 J: tetrachloroethene  
 K: cis-1,2 dichloroethene  
 L: trans-1,2 dichloroethene

NOTE:  
 ALL CONCENTRATIONS ARE IN  
 PPB

SCALE	NO.	DATE	REVISION	DESCRIPTION
NOT TO SCALE				
DWN. BY CKH				
CHK'D. BY NJ				
APPR. BY SM				



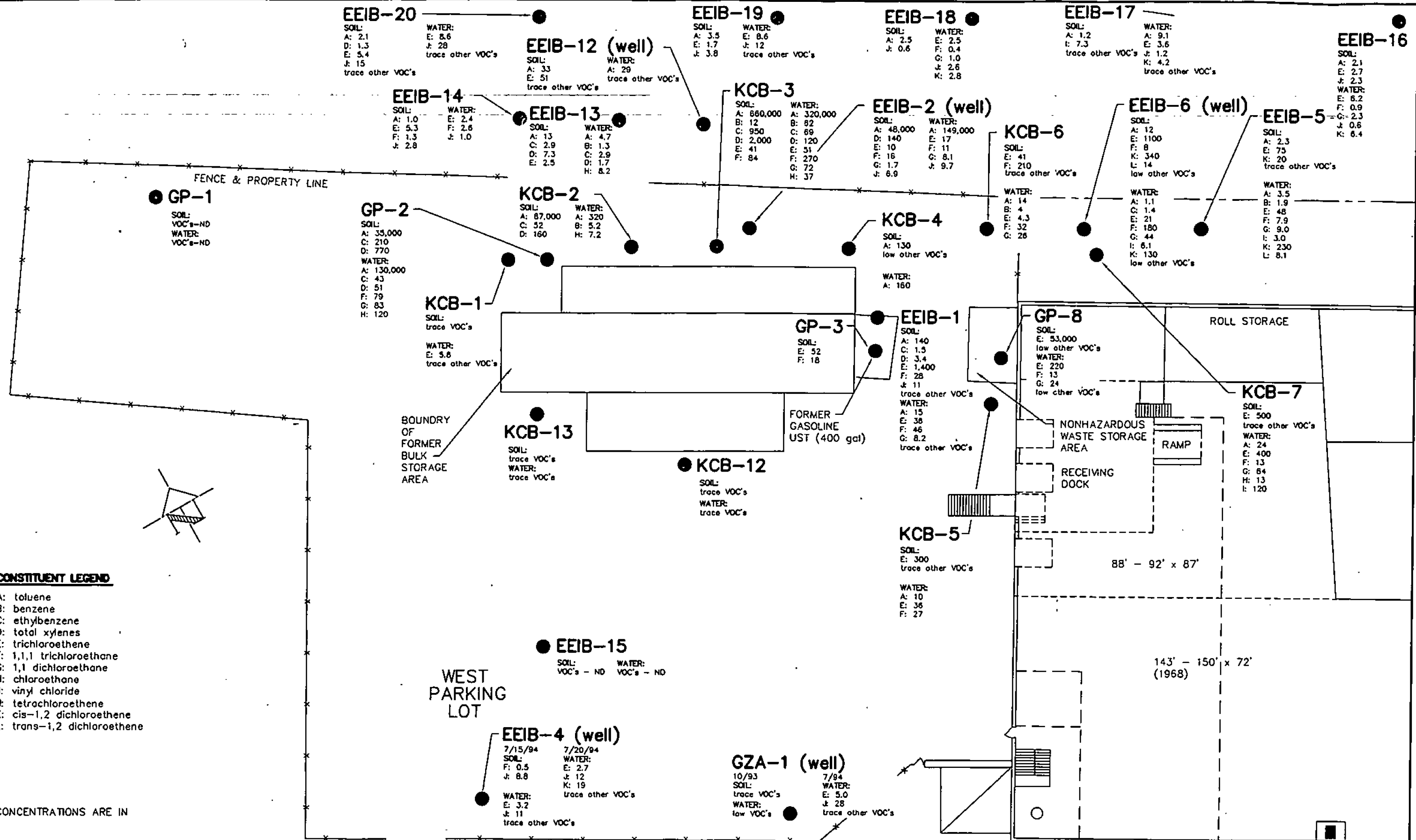
Applied  
 Engineering &  
 Science

Atlanta  
 Georgia

FORMER BULK AND HAZARDOUS WASTE STORAGE AREAS  
 CONTAMINANT CONCENTRATIONS PRIOR TO REMEDIATION  
 KIMBERLY-CLARK CORPORATION  
 TROY, OHIO

FIGURE 3

DATE	JANUARY 2002
DWG. NO.	0737AR52
SHEET NO.	



yards of concrete were removed from the Bulk Storage area and adjacent drum storage pad. An additional 20 cubic yards of concrete were removed from the Nonhazardous Waste Storage area.

Impacted soil was removed from two separate but closely spaced excavations. In the Bulk Storage and adjacent operational areas, the excavation measured approximately 120 feet by 35 feet and extended to the water table at a depth of 13 feet bgs. A total of 715 cubic yards of soil were removed for off-site disposal in 64 roll-off containers (note: the volume of soil removed is less than the volume of the excavation because some clean material was returned to the excavation based on field screening and laboratory analyses, and the fuel oil tank was in a below-ground-level concrete containment structure). Evidence was found that releases occurred in the vicinity of the fuel oil and recycled toluene tanks.

The excavation in the Nonhazardous Waste Storage area was L-shaped. One leg of this excavation extended approximately 80 feet along the north side of the facility building with a width of approximately 30 feet. The other leg ran along the west side of the main facility building and measured 40 feet by 25 feet. The entire excavation extended to the water table at a depth of approximately 13 feet bgs. A total of 810 cubic yards of soil were removed from the Nonhazardous Waste Storage area and transported for off-site disposal in 66 roll-off containers. No field evidence of a contaminant release to soil was noted during this excavation and no source was identified.

A total of 130 containers of material excavated from both areas were transported to Republic Environmental Services in Dayton, Ohio for testing, treatment if necessary, and disposal. Soil in fourteen of the containers was tested and disposed of in a nonhazardous waste landfill. Soil in three of the remaining 116 containers was treated prior to disposal (two containers for toluene and one for TCE), and then disposed of in a hazardous waste landfill along with the soil from the remaining 113 containers.

During excavation, samples of the removed soil and soil samples collected from the walls and floors of the excavations were screened in the field using headspace and bioassay analyses. Samples also were submitted for laboratory analyses. The data from this suite of analyses were used to guide the excavations and confirm that established soil clean-up goals were met. A summary of the results of the soil removal effort compared with established clean-up goals is presented in Table 1. Details of the soil remediation activities, including results of all field screening and laboratory analyses, can be found in the Site Remediation Report (AES, 1995).

**Table 1. Summary Comparison to Clean-up Goals  
West End Soil Remediation**

<b>Constituent</b>	<b>Soil Clean-Up Goal (mg/kg)</b>	<b>Maximum Concentration After Excavation (mg/kg)</b>
Toluene	4.0	0.43
Benzene	0.006	Nondetect
Ethylbenzene	6.0	Nondetect
Xylenes	28.0	0.28
TCE	60.0	18.0
Vinyl Chloride	Background	Nondetect
PCE	10.0	0.79
cDCE	7,000	0.006
Trans-1,2-dichloroethene	7,000	Nondetect

## **2.4.2 Groundwater Treatment**

### **2.4.2.1 Remedial System Design**

A pump-and-treat system was designed and installed to address the groundwater contamination on the west side of the Spinnaker property. The original design of the treatment system includes four extraction wells (PW-1, PW-2, PW-3, and PW-4), an oil/water separator tank, an air-stripping reactor, and a network of monitoring wells.

Since operation began, use of one of the original extraction wells (PW-1) was discontinued and one alternative well (EEIB-2) was brought online.

**Extraction Wells** - Three extraction wells, PW-1, PW-2 and EEIB-2, are located down gradient of the former Bulk Storage area. These wells are all screened across the water table with screened sections extending from a depth of 9.5 feet bgs to total depth of 24.5 feet bgs. The primary constituents targeted for remediation in this area were fuel oil constituents and toluene, both of which were known to be present in the upper part of the aquifer only. Two extraction wells, PW-3 and PW-4, were installed down gradient of the Nonhazardous Waste Storage area to capture any contaminant from that area. These wells are screened from approximately 15 feet into the shallow aquifer to a depth of 30 feet bgs. Testing has shown that the VOCs in this area do not extend below that depth. Well installation details and construction diagrams can be found in the Site Remediation Report (AES, 1995).

An aquifer test was completed in August 1995 to obtain the data necessary to calculate the hydraulic properties of the upper aquifer (see Section 2.2.2). These properties were then used to evaluate the capture zone of the extraction wells, optimal pumping rates, and other factors related to operation of the groundwater pump-and-treat system. The width of the combined-well capture zone was sufficient to contain and remove the two plumes delineated on the west end of the Spinnaker property. The remediation system was not designed to capture or treat the previously identified off-site source or sources of contamination.

**Treatment and Discharge** – Piping from the wells to the treatment building was buried at least three bgs deep to prevent freezing. All underground water piping is double-walled so that the carrier pipe has secondary containment to prevent loss of contaminated water in the event of a leak. All piping slopes so that the secondary containment pipes would drain back to the wells.

Extracted groundwater is pumped to a heated building for treatment and discharge. The building is 20 feet deep by 24 feet long; 12 feet, 6 inches high at the eaves; and 15 feet

high at the peak. The concrete floor of the building has a 6-inch high curb that provides a containment capacity of approximately 1,900 gallons. Groundwater entering the building from the four wells is metered separately prior to being directed to a 2,100-gallon oil/water separator tank. After leaving the oil/water separator, water flows to an air stripper unit. The air stripper reactor consists of a tank designed to hold 160 gallons of water, and a blower designed to provide air at 600 cubic feet per minute (cfm) at a static pressure of 26 inches of water column (in. w.c.). Water is discharged after treatment in the air stripper through a discharge pipe constructed with secondary containment to contain leaks. In the event of a leak, water would flow back into the treatment building where it is contained. Initially, water was discharged to the City of Troy's publicly owned treatment works (POTW); however, this was later changed and treated water is discharged under permit to the Great Miami River (Section 2.4.2.2).

Automatic safety devices include alarm switches that shut down the pumping wells and treatment system in the event of abnormal operation of system components. These situations include low air pressure in the air stripper, water in the building containment, high water level in the separator tank, air-stripper tank or discharge sump, or backup in the discharge line.

#### **2.4.2.2 System Operation**

The groundwater remediation system began continuous operation in August 1995 immediately after construction and testing. Initially, water was pumped from the four extraction wells, PW-1 through PW-4, and treated in the separator tank and air stripper reactor prior to discharge to the City of Troy's sanitary sewer. Exhaust air from the air stripper reactor was treated to remove VOCs by passing it through canisters of activated carbon. The treated vapor was discharged to the atmosphere.

Several operational changes have been made since system start-up in August 1995. Sampling conducted on the exhaust from the air-stripping reactor during the first four

months of operation indicated that activated carbon canisters were not required to meet air permit limitations. The canisters were removed in December 1995.

The width of the plumes decreased rapidly as remediation progressed. In September 1996, the extraction well located farthest west (PW-1) was no longer needed and was replaced by an alternate extraction well (EEIB-2) that was located closer to the center of the contaminant plume. Minimal amounts of fuel oil were recovered in the early months of system operation and it became apparent that most of the fuel oil was removed during excavation of the impacted soil. Therefore, the separator tank was taken off line in June 1997. Groundwater pumped from the extraction wells now goes directly to the air stripper for treatment. Treated water was originally discharged to the sanitary sewer located on the property and that feeds to the City of Troy's POTW. Because of significant reductions in concentrations in the influent, in 1997 Kimberly-Clark applied for and received a National Pollutant Discharge Elimination System (NPDES) permit from OEPA to discharge the treated groundwater directly to the Great Miami River.

The system has operated continuously in this manner since August 1995, with only minor interruptions for cleaning, maintenance and repair of the equipment. A local contractor conducts routine inspections and meter readings.

#### **2.4.2.3 System Performance**

Groundwater monitoring has been conducted quarterly since the start-up of the remediation system. Groundwater clean-up goals were established for the site prior to the start of remediation (AES, 1995, Table 4). From 1995 through 2000, down gradient wells (KMW-6, KMW-7, KMW-8, KMW-9, PW-1, PW-2, PW-3, PW-4, EEIB-2 and EEIB-12) were sampled on a quarterly basis while the background monitoring wells (KMW-5, EEIB-4 and GZA-1) were sampled annually. Monitoring was increased in 2001 to include all wells on the west end of the Spinnaker facility on a quarterly basis. This includes two additional wells (RS04 and RS06) that were installed by OEPA in

2000. In addition, the groundwater treatment system influent and effluent were sampled, at a minimum, on a quarterly basis until the system discharge was redirected from the City of Troy's POTW to the Great Miami River. The effluent is now sampled monthly and the influent quarterly as required by the NPDES permit. No VOCs have been detected in the treatment system effluent in the past three years. No VOCs have been detected in the treatment system influent in concentrations exceeding either groundwater clean-up goals (MCLs) or NPDES permit limits in over two years (in fact, most sampling events during this time period have yielded results below laboratory detection limits).

Groundwater VOC analytical results are summarized in Table 1 in Appendix A. Graphs showing concentrations of contaminants of concern (COC) over time are included Figure 4. The data show a steady decline in toluene concentrations until the clean-up goal was achieved at the end of 1999. Toluene has not been detected in any of the west end wells since March 2000. The analytical results for the chlorinated compounds illustrate a different trend. After an initial drop in concentrations following removal of impacted soil in 1995, concentrations have been reduced only slightly on the down gradient side of the property that is targeted by the continued remediation efforts. While concentrations of the COCs associated with remediated source areas on the Spinnaker property are below the MCL clean-up goals, TCE and vinyl chloride have both exceeded their respective goals in individual samples. PCE and 1,1,1-TCA have continued to migrate onto the Spinnaker Property from off-site sources, as shown by the detection of elevated concentrations in groundwater samples collected from wells KMW-7, EEIB-4 and GZA-1.

The numerous site investigations and remediation efforts conducted over a period of more than eight years by several different parties has developed an extensive database of groundwater contaminant data. A review of the data shows that the concentrations vary spatially as a function of sampling location, natural variations in groundwater chemistry, seasonal water table fluctuations, removal of contaminants by the remediation system, and the flux of contaminants onto the Spinnaker Property.